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Selected NucView® References

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Contents: Publications using NucView® in selected applications and cell types are shown below.

NucView® References by Application

Flow Cytometry

Amendola, R. S., et al. ADAM9 disintegrin domain activates human neutrophils through an autocrine circuit involving integrins and CXCR2. J Leukoc Biol, (2015), DOI: 10.1189/jlb.3A0914-455R (NucView 488 Caspase-3 Assay Kit, flow cytometry, cell type: primary human neutrophils)

Aronchik, I., et al. Target protein interactions of indole-3-carbinol and the highly potent derivative 1-Benzyl-I3C with the C-terminal domain of human elastase uncouples cell cycle arrest from apoptotic signaling. Mol Carcinog, (2011), DOI: DOI:10.1002/mc.20857 (NucView 488 caspase 3 substrate, flow cytometry, cell line: MDA-MB-231 (human breast adenocarcinoma))

Aronchik, I., et al. The Anti-proliferative Response of Indole-3-carbinol in human melanoma cells is Triggered by an Interaction with NEDD4-1 and Disruption of Wild-type PTEN Degradation. Mol Cancer Res, (2014), DOI: 10.1158/1541-7786.MCR-14-0018 (NucView 488, flow cytometry, cell line: G-361 (melanoma cells))

Ben Salem, I., et al. SIRT1 protects cardiac cells against apoptosis induced by zearalenone or its metabolites alpha- and beta-zearalenol through an autophagy-dependent pathway. Toxicol Appl Pharmacol 314, 82-90, (2017), DOI: 10.1016/j.taap.2016.11.012 (NucView 488, flow cytometer, cell line: H9c2)

Ben Salem, I., et al. Crocin and Quercetin protect HCT116 and HEK293 cells from Zearalenone-induced apoptosis by reducing endoplasmic reticulum stress. Cell Stress Chaperones 20(6), 927-938, (2015),

DOI: 10.1007/s12192-015-0613-0 (NucView 488 caspase-3 substrate, flow cytometry, cell lines: HCT116, HEK293)

Berenyi, E., et al. In vitro and in vivo activity of 4-thio-uridylate against JY cells, a model for human acute lymphoid leukemia. Biochem Biophys Res Commun 410(3), 682-687, (2011), DOI: DOI:10.1016/j.bbrc.2011.06.056 (NucView 488, flow cytometry, cell line: JY (human lymphoblastic leukemia))

Bohm, M., et al. Helicase CHD4 is an epigenetic coregulator of PAX3-FOXO1 in alveolar rhabdomyosarcoma. J Clin Invest 126(11), 4237-4249, (2016), DOI: 10.1172/JCI85057 (NucView 405 Caspase-3 Substrate, flow cytometry, microscopy, cell line: RH4)

Boussabbeh, M., et al. Patulin induces apoptosis through ROS-mediated endoplasmic reticulum stress pathway. Toxicol Sci 144(2), 328-337, (2015), DOI: 10.1093/toxsci/kfu319 (NucView 488 caspase-3 substrate, flow cytometer, microscopy, cell lines: HCT116, HEK293)

Boussabbeh, M., et al. Crocin and quercetin prevent PAT-induced apoptosis in mammalian cells: Involvement of ROS-mediated ER stress pathway. Environ Toxicol, (2015), DOI: 10.1002/tox.22185 (NucView 488 caspase-3 substrate, flow cytometry, microscopy, cell lines: HCT116, HEK293)

Brodsky, I. E. and Medzhitov, R. Reduced secretion of YopJ by Yersinia limits in vivo cell death but enhances bacterial virulence. PLoS Pathog 4(5), e1000067, (2008), DOI: DOI:10.1371/journal.ppat.1000067 (NucView 488 Caspase-3 fluorescent substrate, flow cytometry, microscopy, primary mouse macrophages and dendritic cells)

Cen, H., et al. DEVD-NucView488: a novel class of enzyme substrates for real-time detection of caspase-3 activity in live cells. FASEB J 22(7), 2243-2252, (2008), DOI: DOI:10.1096/fj.07-099234 (NucView 488, flow cytometry, cell lines: Jurkat (human T lymphocyte), HeLa (human cervical cancer))

Cestari, I., et al. Trypanosoma cruzi immune evasion mediated by host cell-derived microvesicles. J Immunol 188(4), 1942-1952, (2012), DOI: 10.4049/jimmunol.1102053 (NucView 488 Caspase-3 Assay, flow cytometry, Cell line: THP-1 cells)

Choo, B. a. F., WJ. Use of markers of undifferentiated pluripotent stem cells. in: United States Patent Application United States Patent Application US 21030115623 A1(US 13/583,546), (2013), (Primary human stem cells)

Claudio, E., et al. Cell-autonomous role for NF-kappa B in immature bone marrow B cells. J Immunol 182(6), 3406-3413, (2009), DOI: DOI:10.4049/jimmunol.0803360 (NucView 488 Caspase-3, flow cytometry, primary mouse immature B cells)

Coêlho, L. C. D., et al. Novel phthalimide derivatives with TNF-α and IL-1β expression inhibitory and apoptotic inducing properties. Med Chem Commun *5*, 758-765, (2014), DOI: 10.1039/c4md00070f (NucView 488, flow cytometry, cell line: FRT-Jurkat TNF)

Contreras, L., et al. Induction of apoptosis via proteasome inhibition in leukemia/lymphoma cells by two potent piperidones. Cell Oncol (Dordr), (2018), DOI: 10.1007/s13402-018-0397-1 (NucView 488 caspase-3 substrate, flow cytometry, cell lines: HL-60, Ramos)

Cunha, B., et al. Exploring continuous and integrated strategies for the up- and downstream processing of human mesenchymal stem cells. J Biotechnol, (2015), DOI: 10.1016/j.jbiotec.2015.02.023 (NucView 488, flow cytometry, cell lines: HFF, stem cells)

Cunha, B., et al. Filtration methodologies for the clarification and concentration of human mesenchymal stem cells. Journal of Membrane Science *478*, 117-129, (2015), DOI: 10.1016/j.memsci.2014.12.041 (nucview 488, mitoview 633, Apoptosis Assay Kit, flow cytometry, hMSC)

Dahlawi, H., et al. Polyphenols are responsible for the proapoptotic properties of pomegranate juice on leukemia cell lines. Food Science & Nutrition 1(2), 196-208, (2013), DOI: DOI:10.1002/fsn3.26 (NucView 488, flow cytometry, cell lines: CCRF-CEM, HL-60, and MOLT-3 (human leukemia) and THP-1 (human monocyte))

de Sica, R. C., et al. Study of 1550nm Erbium Glass Laser Fractional non-ablative treatment of photoaging: Comparative clinical effects, histopathology, electron microscopy and immunohistochemistry. J Cosmet Laser Ther, 1-31, (2016), DOI: 10.3109/14764172.2015.1114645 (NucView 488, flow cytometry, Cell type: human skin biopsy cells)

Dikovskaya, D., et al. Mitotic Stress Is an Integral Part of the Oncogene-Induced Senescence Program that Promotes Multinucleation and Cell Cycle Arrest. Cell Rep 12(9), 1483-1496, (2015), DOI: 10.1016/j.celrep.2015.07.055 (NucView 488, flow cytometry, cell type: primary human fibroblast)

Eicher, C., et al. Treatment effects of the multikinase inhibitor sorafenib on hepatoblastoma cell lines and xenografts in NMRI-Foxn1(nu) mice. Liver Int, (2011), DOI: 10.1111/j.1478-3231.2011.02729.x (NucView 488, flow cytometry, human hepatoblastoma lines HepT1, HUH6)

Feng, J. H., et al. A Novel Plant Sesquiterpene Lactone Derivative, DETD-35, Suppresses BRAFV600E Mutant Melanoma Growth and Overcomes Acquired Vemurafenib Resistance in Mice. Mol Cancer Ther 15(6), 1163-1176, (2016), DOI: 10.1158/1535-7163.MCT-15-0973 (NucView 488, flow cytometry, cell line: A-375)

Ferreira, A. K., et al. Synthetic Phosphoethanolamine Induces Apoptosis Through Caspase-3 Pathway by Decreasing Expression of Bax/Bad Protein and Changes Cell Cycle in Melanoma. Journal of Cancer Science & Therapy *03*, (2011), DOI: 10.4172/1948-5956.1000058 (nucview 488, flow cytometry, B16F10 murine melanoma cells)

Gallerne, C., et al. Hsp90 inhibition by PU-H71 induces apoptosis through endoplasmic reticulum stress and mitochondrial pathway in cancer cells and overcomes the resistance conferred by Bcl-2. Biochim Biophys Acta, (2013), DOI: 10.1016/j.bbamcr.2013.02.014 (NucView 488, flow cytometry, cell line: HeLa)

Gomez, M. C., et al. Nuclear transfer of sand cat cells into enucleated domestic cat oocytes is affected by cryopreservation of donor cells. Cloning Stem Cells 10(4), 469-483, (2008), DOI: 10.1089/clo.2008.0021 (NucView 488, flow cytometry, cell type: primary sand cat skin fibroblasts)

Grabocka, E. and Bar-Sagi, D. Mutant KRAS Enhances Tumor Cell Fitness by Upregulating Stress Granules. Cell 167(7), 1803-1813 e1812, (2016), DOI: 10.1016/j.cell.2016.11.035 (NucView 405-Caspase 3, flow cytometry, cell lines: DLD-1, NCI-H508)

Handa, P., et al. FLIP (Flice-like inhibitory protein) suppresses cytoplasmic double-stranded-RNA-induced apoptosis and NF-kappaB and IRF3-mediated signaling. Cell Commun Signal 9(1), 16, (2011), DOI: 10.1186/1478-811X-9-16 (NucView 488, flow cytometry, microscopy, cell line: mouse embryonic fibroblasts)

Jangamreddy, J. R., et al. Salinomycin induces activation of autophagy, mitophagy and affects mitochondrial polarity: differences between primary and cancer cells. Biochim Biophys Acta 1833(9), 2057-2069, (2013), DOI: 10.1016/j.bbamcr.2013.04.011 (NucView 488, flow cytometry, microscopy)

Jeong, J. C., et al. Kaempferol induces cell death through ERK and Akt-dependent down-regulation of XIAP and survivin in human glioma cells. Neurochem Res 34(5), 991-1001, (2009), DOI: 10.1007/s11064-008-9868-5 (NucView 488, flow cytometry, cell types: A172 human glioma cell line)

Kato, M., et al. Dual role of autophagy in stress-induced cell death in rheumatoid arthritis synovial fibroblasts. Arthritis Rheum, (2013), DOI: 10.1002/art.38190 (NucView 488, flow cytometry, cell type: human synovial fibroblasts)

Knapp, D., et al. Mass Cytometric Analysis Reveals Viable Activated Caspase-3(+) Luminal Progenitors in the Normal Adult Human Mammary Gland. Cell Rep 21(4), 1116-1126, (2017), DOI: 10.1016/j.celrep.2017.09.096 (NucView 488, flow cytometry, cells: mammary luminal progenitor cells)

Konen, J. M., et al. Dual Inhibition of MEK and AXL Targets Tumor Cell Heterogeneity and Prevents Resistant Outgrowth Mediated by the Epithelial-to-Mesenchymal Transition in NSCLC. Cancer Res 81(5), 1398-1412, (2021), DOI: 10.1158/0008-5472.CAN-20-1895 (NucView® 405 Caspase 3 substrate, flow cytometry)

Kopec, A. K., et al. Caspase Inhibition Reduces Hepatic Tissue Factor-Driven Coagulation In Vitro and In Vivo. Toxicol Sci 162(2), 396-405, (2018), DOI: 10.1093/toxsci/kfx268 (NucView 488, flow cytometry, cells: hepatocytes)

Li, K., et al. Modulation of Notch signaling by antibodies specific for the extracellular negative regulatory region of NOTCH3. J Biol Chem 283(12), 8046-8054, (2008), DOI: 10.1074/jbc.M800170200 (NucView 488, flow cytometry, cell types: 293-T)

Li, Y. and Shively, J. E. CEACAM1 Regulates Fas-mediated Apoptosis in Jurkat T-cells via its Interaction with beta-catenin. Exp Cell Res, (2013), DOI: 10.1016/j.yexcr.2013.02.020 (NucView 488, flow cytometry, cell line: Jurkat)

Macsik, L. L., et al. Induction of apoptosis-like cell death by coelomocyte extracts from Eisenia andrei earthworms. Mol Immunol 67(2 Pt B), 213-222, (2015), DOI: 10.1016/j.molimm.2015.05.015 (NucView 488, flow cytometry, cell line: SP2/0-AG14)

Morelli, A. E., et al. Neurokinin-1 Receptor Signaling Is Required for Efficient Ca2+ Flux in T-Cell-Receptor-Activated T Cells. Cell Reports 30(10), 3448-3465.e3448, (2020), DOI: 10.1016/j.celrep.2020.02.054 (NucView 405 Caspase-3 Substrate, fluorescence-activated cell sorting)

Oldham, E. D., et al. Cytotoxic activity of triazole-containing alkyl beta-D-glucopyranosides on a human T-cell leukemia cell line. Chem Cent J 9, 3, (2015), DOI: 10.1186/s13065-014-0072-1 (NucView 488, flow cytometry, cell line: Jurkat)

Park, J. Y., et al. Ceramide induces apoptosis via caspase-dependent and caspase-independent pathways in mesenchymal stem cells derived from human adipose tissue. Arch Toxicol 85(9), 1057-1065, (2011), DOI: 10.1007/s00204-011-0645-x (NucView 488, flow cytometry, cell type: adipose mesenchymal stem cells)

Pedroza, D. A., et al. The cytotoxic effect of 2-acylated-1,4-naphthohydroquinones on leukemia/lymphoma cells. Bioorg Med Chem 22(2), 842-847, (2014), DOI: 10.1016/j.bmc.2013.12.007 (NucView 488, flow cytometry, CEM T cell line; flow cytometry)

Prola, A., et al. SIRT1 protects the heart from ER stress-induced cell death through eIF2alpha deacetylation. Cell Death Differ 24(2), 343-356, (2017), DOI: 10.1038/cdd.2016.138 (NucView 488, flow cytometry)

Robles-Escajeda, E., et al. A novel curcumin-like dienone induces apoptosis in triple-negative breast cancer cells. Cell Oncol (Dordr) 39(3), 265-277, (2016), DOI: 10.1007/s13402-016-0272-x (NucView 488, flow cytometry, cell line: MDA-MB-231)

Robles-Escajeda, E., et al. Searching in mother nature for anti-cancer activity: anti-proliferative and pro-apoptotic effect elicited by green barley on leukemia/lymphoma cells. PLoS One 8(9), e73508, (2013), DOI: 10.1371/journal.pone.0073508 (NucView 488, flow cytometry, NALM-6 cells)

Stewart, S. G., et al. New thalidomide analogues derived through Sonogashira or Suzuki reactions and their TNF expression inhibition profiles. Bioorg Med Chem 18(2), 650-662, (2010), DOI: 10.1016/j.bmc.2009.12.001 (NucView 488, flow cytometry, cell line: Jurkat)

Su, N. W., et al. Metronomic Cordycepin Therapy Prolongs Survival of Oral Cancer-Bearing Mice and Inhibits Epithelial-Mesenchymal Transition. Molecules 22(4), (2017), DOI: 10.3390/molecules22040629 (NucView 488, flow cytometry, cell lines: SAS, OECM-1)

Sztiller-Sikorska, M., et al. A non-apoptotic function of caspase-3 in pharmacologically-induced differentiation of K562 cells. Br J Pharmacol 157(8), 1451-1462, (2009), DOI: 10.1111/j.1476-5381.2009.00333.x (NucView 488, flow cytometry, cell types: K562 cells)

Takata, N., et al. Mitochondrial Ca2+ removal amplifies TRAIL cytotoxicity toward apoptosis-resistant tumor cells via promotion of multiple cell death modalities. Int J Oncol 51(1), 193-203, (2017), DOI: 10.3892/ijo.2017.4020 (NucView 488, flow cytometry, cell lines: HOS, A-375)

Tribulatti, M. V., et al. Galectin-8 induces apoptosis in the CD4(high)CD8(high) thymocyte subpopulation. Glycobiology 17(12), 1404-1412, (2007), DOI: 10.1093/glycob/cwm104 (NucView 488, flow cytometry, cell type: mouse thymocytes)

Valente, M., et al. Apoptotic cell capture by DCs induces unexpectedly robust autologous CD4 T-cell responses. Eur J Immunol, (2014), DOI: 10.1002/eji.201344191 (NucView 488, flow cytometry, cell type: primary human T cells)

Wang, H., et al. The role of charged multivesicular body protein 5 in programmed cell death in leukemic cells. Acta Biochim Biophys Sin (Shanghai) 45(5), 383-390, (2013), DOI: 10.1093/abbs/gmt028 (NucView 488, flow cytometry, cell line: U937)

Yang, W., et al. Unspecific CTL Killing Is Enhanced by High Glucose via TNF-Related Apoptosis-Inducing Ligand. Front Immunol *13*, 831680, (2022), DOI: 10.3389/fimmu.2022.831680 (Flow Cytometry, 1.4E7 cell)

Zhang, H., et al. Ubl4A is critical for mitochondrial fusion process under nutrient deprivation stress. PLoS One 15(11), e0242700, (2020), DOI: 10.1371/journal.pone.0242700 (NucView 530 Caspase-3 substrate, flow cytometer)

Zhang, X., et al. The tumor promoter and NF-kappaB modulator Bcl-3 regulates splenic B cell development. J Immunol 191(12), 5984-5992, (2013), DOI: 10.4049/jimmunol.1300611 (NucView 488, flow cytometry, cell type: primary mouse B cells)

Microscopy

Alinezhad, S., et al. Validation of Novel Biomarkers for Prostate Cancer Progression by the Combination of Bioinformatics, Clinical and Functional Studies. PLoS One 11(5), e0155901, (2016), DOI: 10.1371/journal.pone.0155901 (NucView 488, Microscopy, Cell type: VCaP spheroids)

Angeloni, M. B., et al. Apoptosis and S phase of the cell cycle in BeWo trophoblastic and HeLa cells are differentially modulated by Toxoplasma gondii strain types. Placenta 30(9), 785-791, (2009), DOI: DOI:10.1016/j.placenta.2009.07.002 (NucView 488, Microscopy, Cell lines: BeWo (human trophoblast), HeLa (human cervical cancer))

Angelova, P. R., et al. Role of inorganic polyphosphate in mammalian cells: from signal transduction and mitochondrial metabolism to cell death. Biochem Soc Trans 44(1), 40-45, (2016), DOI: 10.1042/BST20150223 (NucView 488, Microscopy, Cell type: primary rat astrocyte)

Antczak, C., et al. Live-cell imaging of caspase activation for high-content screening. J Biomol Screen 14(8), 956-969, (2009), DOI: DOI:10.1177/1087057109343207 (NucView 488, Microscopy, Cell line: HeLa (human cervical cancer))

Aronchik, I., et al. Novel Potent and Selective Inhibitors of p90 Ribosomal S6 Kinase Reveal the Heterogeneity of RSK Function in MAPK Driven Cancers. Mol Cancer Res, (2014), DOI: 10.1158/1541-7786.MCR-13-0595 (NucView 488, Microscopy, Cell lines: MDA-MB-231, H358)

Arsic, N., et al. The p53 isoform delta133p53ss regulates cancer cell apoptosis in a RhoB-dependent manner. PLoS One 12(2), e0172125, (2017), DOI: 10.1371/journal.pone.0172125 (NucView 488, Microscopy, Cell lines: CCL-227, CCL-228 (colon cancer))

Atieh, Y., et al. Pulsatile contractions promote apoptotic cell extrusion in epithelial tissues. Curr Biol 31(6), 1129-1140 e1124, (2021), DOI: 10.1016/j.cub.2020.12.005 (NucView 405, zebrafish larvae, epithelial damage assay)

Awasthi, B. P., et al. Plumbagin, a plant-derived naphthoquinone metabolite induces mitochondria mediated apoptosis-like cell death in Leishmania donovani: an ultrastructural and physiological study. Apoptosis 21(8), 941-953, (2016), DOI: 10.1007/s10495-016-1259-9 (NucView 488, Microscopy, Cell type: Leishmania)

Baar, M. P., et al. Targeted Apoptosis of Senescent Cells Restores Tissue Homeostasis in Response to Chemotoxicity and Aging. Cell 169(1), 132-147 e116, (2017), DOI: 10.1016/j.cell.2017.02.031 (NucView 488 Caspase-3, Incucyte®, cell line: IMR-90)

Balez, R., et al. Neuroprotective effects of apigenin against inflammation, neuronal excitability and apoptosis in an induced pluripotent stem cell model of Alzheimer's disease. Sci Rep 6, 31450, (2016), DOI: 10.1038/srep31450 (NucView 488 enzyme substrate, Incucyte®, cell type: primary neurons

Balijepalli, M. K., et al. Antiproliferative activity and induction of apoptosis in estrogen receptor-positive and negative human breast carcinoma cell lines by Gmelina asiatica roots. Pharmacognosy Res 2(2), 113-119, (2010), DOI: DOI:10.4103/0974-8490.62949 (NucView 488, Microscopy, Cell lines: MCF-7, MDA-MB-231 (human breast adenocarcinoma))

Balzarini, J., et al. 2-aminothiophene-3-carboxylic acid ester derivatives as novel highly selective cytostatic agents. Invest New Drugs 32(1), 200-210, (2014), DOI: 10.1007/s10637-013-9981-4 (NucView 488, Microscopy, Cell lines: HeLa, PC-3)

Benetti, L. and Roizman, B. In transduced cells, the US3 protein kinase of herpes simplex virus 1 precludes activation and induction of apoptosis by transfected procaspase 3. J Virol 81(19), 10242-10248, (2007), DOI: DOI:10.1128/JVI.00820-07 (NucView 488, Microscopy, Cell line: U2OS (human osteosarcoma))

Bjork, J. K., et al. Heat-shock factor 2 is a suppressor of prostate cancer invasion. Oncogene, (2015), DOI: onc2015241 [pii] 10.1038/onc.2015.241 (NucView, Microscopy, spheroids)

Bjorkman, M., et al. Systematic knockdown of epigenetic enzymes identifies a novel histone demethylase PHF8 overexpressed in prostate cancer with an impact on cell proliferation, migration and invasion. Oncogene, (2011), DOI: DOI:10.1038/onc.2011.512 (NucView 488, Microscopy, Cell line: PC-3 (human prostate cancer))

Bosch, M. and Franklin-Tong, V. E. Temporal and spatial activation of caspase-like enzymes induced by self-incompatibility in Papaver pollen. Proc Natl Acad Sci U S A 104(46), 18327-18332, (2007), DOI: DOI:10.1073/pnas.0705826104 (NucView 488, Microscopy, Papaver rhoeas (field poppy) pollen tube)

Brassesco, M. S., et al. Activator Protein-1 Inhibition by 3-[(Dodecylthiocarbonyl)Methyl]-Glutamaride Impairs Invasion and Radiosensitizes Osteosarcoma Cells In Vitro. Cancer Biother Radiopharm, (2013), DOI: DOI:10.1089/cbr.2012.1305 (NucView 488, Microscopy, Cell line: HOS (human osteosarcoma))

Brassesco, M. S., et al. In vitro targeting of Polo-like kinase 1 in bladder carcinoma: comparative effects of four potent inhibitors. Cancer Biol Ther 14(7), 648-657, (2013), DOI: 10.4161/cbt.25087 (NucView 488, Microscopy, Cell lines: RT4, 5637, and T24)

Bueno, O., et al. High-affinity ligands of the colchicine domain in tubulin based on a structure-guided design. Sci Rep 8(1), 4242, (2018), DOI: 10.1038/s41598-018-22382-x (NucView® 488, NucView® 530, fluorescence microscopy, cell line: MDA-MB-231)

Cai, Y., et al. The NuRD complex cooperates with DNMTs to maintain silencing of key colorectal tumor suppressor genes. Oncogene, (2013), DOI: 10.1038/onc.2013.178 (NucView Caspase-3/7 Apoptosis reagent, Incucyte®, RKO cells; CHD4 KD + DAC treatment)

Cen, H., et al. DEVD-NucView488: a novel class of enzyme substrates for real-time detection of caspase-3 activity in live cells. FASEB J 22(7), 2243-2252, (2008), DOI: DOI:10.1096/fj.07-099234 (NucView 488, flow cytometry, cell lines: Jurkat (human T lymphocyte), HeLa (human cervical cancer))

Cheli, V. T., et al. Erratum to: Golli Myelin Basic Proteins Modulate Voltage-Operated Ca++ Influx and Development in Cortical and Hippocampal Neurons. Mol Neurobiol, (2016), DOI: 10.1007/s12035-016-0264-x (NucView 488, Microscopy)

Cheli, V. T., et al. Voltage-gated Ca2+ entry promotes oligodendrocyte progenitor cell maturation and myelination in vitro. Exp Neurol 265, 69-83, (2015), DOI: 10.1016/j.expneurol.2014.12.012 (NucView 488, Microscopy, Cell type: mouse primary oligodendrocyte progenitor cells)

Chen, C. H., et al. Protein kinase C delta phosphorylates ecdysone receptor B1 to promote gene expression and apoptosis under 20-hydroxyecdysone regulation. Proc Natl Acad Sci U S A 114(34),

E7121-E7130, (2017), DOI: 10.1073/pnas.1704999114 (NucView 488, Microscopy, Cell line: HaEpi (insect cells))

Cheng, G., et al. Micro-environmental mechanical stress controls tumor spheroid size and morphology by suppressing proliferation and inducing apoptosis in cancer cells. PLoS One 4(2), e4632, (2009), DOI: DOI:10.1371/journal.pone.0004632 (NucView 488, Microscopy, Cell line: 67NR (mouse mammary carcinoma))

Chiu, S. H., et al. Rapid fabrication of carbon quantum dots as multifunctional nanovehicles for dual-modal targeted imaging and chemotherapy. Acta Biomater 46, 151-164, (2016), DOI: 10.1016/j.actbio.2016.09.027 (NucView 488, Microscopy, Cell lines: HeLa, HepG2)

Choo, B. a. F., WJ. Use of markers of undifferentiated pluripotent stem cells. in: United States Patent Application United States Patent Application US 21030115623 A1(US 13/583,546), (2013), (Primary human stem cells)

Chung, H. K., et al. A compact synthetic pathway rewires cancer signaling to therapeutic effector release. Science 364(6439), (2019), DOI: 10.1126/science.aat6982 (NucView 488 Caspase-3 substrate, epifluorescence microscope)

Cribbes, S., et al. A Novel Multiparametric Drug-Scoring Method for High-Throughput Screening of 3D Multicellular Tumor Spheroids Using the Celigo Image Cytometer. SLAS Discov 22(5), 547-557, (2017), DOI: 10.1177/2472555217689884 (Cell line: U-87 MG spheroids)

Daya, S., et al. Integrating an automated in vitro combination screening platform with live-cell and endpoint phenotypic assays to support the testing of drug combinations.. Paper presented at: SBS 16th Annual Conference & Exhibition, (Phoenix, Arizona.), (2010)

Davies, D. J., et al. (2022). Photobiomodulation reduces hippocampal apoptotic cell death and produces a Raman spectroscopic "signature". PLoS One *17*, e0264533, (2022), DOI: 10.1371/journal.pone.0264533 (NucView 488, microscopy, hippocampal tissue)

De, P., et al. Triple Fluorescence staining to Evaluate Mechanism-based Apoptosis following Chemotherapeutic and Targeted Anti-cancer Drugs in Live Tumor Cells. Sci Rep 8(1), 13192, (2018), DOI: 10.1038/s41598-018-31575-3 (NucView 488-Casp3 substrate, MitoViewBlue, Cell line: OVK18, microscopy)

Dereli-Korkut, Z., et al. Three Dimensional Microfluidic Cell Arrays for ex Vivo Drug Screening with Mimicked Vascular Flow. Anal Chem, (2014), DOI: 10.1021/ac403899j (Nucview 488, Microscopy, Cell line: PC9 (human non-small cell lung cancer))

Dewerth, A., et al. In vitro evaluation of the Aurora kinase inhibitor VX-680 for Hepatoblastoma. Pediatr Surg Int, (2012), DOI: DOI:10.1007/s00383-012-3086-6 (NucView 488, Microscopy, Cell line: HepT1 and HUH6 (human hepatoblastoma))

Dufer, M., et al. BK channels affect glucose homeostasis and cell viability of murine pancreatic beta cells. Diabetologia 54(2), 423-432, (2011), DOI: DOI:10.1007/s00125-010-1936-0 (NucView 488, Microscopy, Primary rat pancreatic beta cells)

Eisenhoffer, G. T., et al. Crowding induces live cell extrusion to maintain homeostatic cell numbers in epithelia. Nature, (2012), DOI: 10.1038/nature10999 (NucView 488, Microscopy, MDCK)

Eriksson, A., et al. The novel tyrosine kinase inhibitor AKN-028 has significant antileukemic activity in cell lines and primary cultures of acute myeloid leukemia. Blood Cancer J 2, e81, (2012), DOI: 10.1038/bcj.2012.28 (NucView 488 caspase-3 substrate, Incucyte®, microscopy, cell line: MV4-11 (primary human leukemia))

Filali, L., et al. Ultrarapid lytic granule release from CTLs activates Ca2+-dependent synaptic resistance pathways in melanoma cells. science advances 8, (2022), DOI: 10.1126/sciadv.abk3234 (NucView 405, melanoma cells, time lapse microscopy, 647 live-cell microtubule stain)

Fu, W., et al. Combinatorial Drug Screening Based on Massive 3D Tumor Cultures Using Micropatterned Array Chips. Anal Chem *95*, 2504-2512, (2023), DOI: 10.1021/acs.analchem.2c04816 (NucView 488, Microscopy)

Gao, F., et al. Au Nanoclusters and Photosensitizer Dual Loaded Spatiotemporal Controllable Liposomal Nanocomposites Enhance Tumor Photodynamic Therapy Effect by Inhibiting Thioredoxin Reductase. Adv Healthc Mater 6(7), (2017), DOI: 10.1002/adhm.201601453 (NucView 488, Microscopy, Cell line: MDA-MB-231)

Gao, L., et al. Plasmon-mediated generation of reactive oxygen species from near-infrared light excited gold nanocages for photodynamic therapy in vitro. ACS Nano 8(7), 7260-7271, (2014), DOI: 10.1021/nn502325j (NucView 488, Microscopy, Cell line: HeLa)

Geng, L., et al. Indolyl-quinuclidinols inhibit ENOX activity and endothelial cell morphogenesis while enhancing radiation-mediated control of tumor vasculature. FASEB J 23(9), 2986-2995, (2009), DOI: 10.1096/fj.09-130005 (NucView 488, Microscopy, HUVEC)

Gier, B., et al. Suppression of KATP channel activity protects murine pancreatic beta cells against oxidative stress. J Clin Invest 119(11), 3246-3256, (2009), DOI: 10.1172/JCI38817 (NucView 488, Microscopy, Cell types: primary mouse pancreatic islet cells)

Globig, P., et al. Slow degrading Mg-based materials induce tumor cell dormancy on an osteosarcoma-fibroblast coculture model. Bioact Mater *16*, 320-333, (2022), DOI: 10.1016/j.bioactmat.2021.12.031 (NucView 405, microscopy, CF405M, Saos-eGFP)

Granot, Z., et al. Tumor entrained neutrophils inhibit seeding in the premetastatic lung. Cancer Cell 20(3), 300-314, (2011), DOI: 10.1016/j.ccr.2011.08.012 (NucView 488, Microscopy, Cell line: 4T1 mammary tumor cells)

Gualda, E. J., et al. Imaging of human differentiated 3D neural aggregates using light sheet fluorescence microscopy. Front Cell Neurosci 8, 221, (2014), DOI: 10.3389/fncel.2014.00221 (NucView 488, Microscopy, Cell type: neural aggregates)

Guardia Clausi, M., et al. Intranasal administration of aTf protects and repairs the neonatal white matter after a cerebral hypoxic-ischemic event. Glia, (2012), DOI: 10.1002/glia.22374 (NucView 488, Microscopy, Cell type: primary mouse oligodendrocyte precursor cells)

Guipouy, D., et al. Granulysin- and granzyme-dependent elimination of myeloid cells by therapeutic ova-specific type 1 regulatory T cells. Int Immunol 31(4), 239-250, (2019), DOI: 10.1093/intimm/dxy083 (NucView 488 caspase-3 substrate, microscopy)

Hafner, M., et al. Growth rate inhibition metrics correct for confounders in measuring sensitivity to cancer drugs. Nat Methods 13(6), 521-527, (2016), DOI: 10.1038/nmeth.3853 (NucView 488 caspase 3 substrate, Incucyte®, microscopy, cell line: MCF10a)

Hamzeloo-Moghadam, M., et al. Cytotoxic Activity and Apoptosis Induction of Hypericum scabrum L. Iran Red Crescent Med J 17(10), e19453, (2015), DOI: 10.5812/ircmj.19453 (NucView 488, Microscopy, Cell line: MCF-7)

Hamzeloo-Moghadam, M., et al. (2015). Achillea vermicularis a medicinal plant from Iranian Traditional Medicine induces apoptosis in MCF-7 cells. Research Journal of Pharmacognosy *2, (2015).* (NucView 488, microscopy, MCF-7 human breast adenocarcinoma)

Handa, P., et al. FLIP (Flice-like inhibitory protein) suppresses cytoplasmic double-stranded-RNA-induced apoptosis and NF-kappaB and IRF3-mediated signaling. Cell Commun Signal 9(1), 16, (2011), DOI: 10.1186/1478-811X-9-16 (NucView 488, flow cytometry, microscopy, cell line: mouse embryonic fibroblasts)

Hanley, P. J., et al. Transient P2x7 Receptor Activation Triggers Macrophage Death Independent of Tlr2/4, Casp1 and Panx1. J Biol Chem 287(13), 10650-10663, (2012), DOI: 10.1074/jbc.M111.332676 (NucView 488, Microscopy, Primary mouse peritoneal macrophages)

He, J., et al. On-chip monitoring of skeletal myoblast transplantation for the treatment of hypoxia-induced myocardial injury. Analyst 139(18), 4482-4490, (2014), DOI: 10.1039/c4an00697f (NucView 488, Microscopy, Cell line: H9C2 (myocardial cells))

Hofmeister-Brix, A., et al. The ubiquitin-proteasome system regulates the stability and activity of the glucose sensor glucokinase in pancreatic beta-cells. Biochem J 456(2), 173-184, (2013), DOI: 10.1042/BJ20130262 (NucView 488, Microscopy, Cell line: MIN6)

Ichimaru, Y., et al. Sasa veitchii extract induces anticancer effects via inhibition of cyclin D1 expression in MCF-7 cells. Nagoya J Med Sci 82(3), 509-518, (2020), DOI: 10.18999/nagjms.82.3.509 (NucView 405 Caspase-3 Substrate, fluorescence microscopy)

Isherwood, B., et al. Live cell in vitro and in vivo imaging applications: accelerating drug discovery. Pharmaceutics 3(2), 141-170, (2011), DOI: 10.3390/pharmaceutics3020141 (NucView 488, Microscopy)

Ishii, K., et al. Serratia marcescens induces apoptotic cell death in host immune cells via a lipopolysaccharide- and flagella-dependent mechanism. J Biol Chem, (2012), DOI: 10.1074/jbc.M112.399667 (NucView 488, Microscopy, Cell type: silkworm hemocytes)

Jangamreddy, J. R., et al. Salinomycin induces activation of autophagy, mitophagy and affects mitochondrial polarity: differences between primary and cancer cells. Biochim Biophys Acta 1833(9), 2057-2069, (2013), DOI: 10.1016/j.bbamcr.2013.04.011 (NucView 488, flow cytometry, microscopy)

Jechlinger, M., et al. Regulation of transgenes in three-dimensional cultures of primary mouse mammary cells demonstrates oncogene dependence and identifies cells that survive deinduction. Genes Dev 23(14), 1677-1688, (2009), DOI: 10.1101/gad.1801809 (NucView 488, Microscopy, Cell types: primary mouse mammary cells)

Johnson, A., et al. TFG clusters COPII-coated transport carriers and promotes early secretory pathway organization. EMBO J 34(6), 811-827, (2015), DOI: 10.15252/embj.201489032 (NucView 488, Microscopy, Cell line: RPE-1)

Johnston, H. J., et al. Naturally Inspired Peptide Leads: Alanine Scanning Reveals an Actin-Targeting Thiazole Analogue of Bisebromoamide. Chembiochem 17(17), 1621-1627, (2016), DOI: 10.1002/cbic.201600257 (NucView 488, Incucyte®, microscopy, Cell line: HCT116)

Jones, S. Cell-Penetrating Peptides: Methods and Protocols. Methods in Molecular Biology 683, 291-303, (2011), (NucView 488, Microscopy)

Kamynina, A. V., et al. Acetylcholine and antibodies against the acetylcholine receptor protect neurons and astrocytes against beta-amyloid toxicity. Int J Biochem Cell Biol 45(4), 899-907, (2013), DOI: 10.1016/j.biocel.2013.01.011 (NucView 488, Microscopy, Cell types: primary rat hippocampal & cortical neurons, glia)

Kasim, N. R., et al. Live fluorescence and transmission-through-dye microscopic study of actinomycin D-induced apoptosis and apoptotic volume decrease. Apoptosis 18(4), 521-532, (2013), DOI: 10.1007/s10495-013-0804-z (NucView 488, Microscopy, Cell line: HeLa)

Kathuria, M., et al. Induction of Mitochondrial Dysfunction and Oxidative Stress in Leishmania donovani by Orally Active Clerodane Diterpene. Antimicrob Agents Chemother 58(10), 5916-5928, (2014), DOI: 10.1128/AAC.02459-14 (NucView 488, Microscopy, Cell type: leishmania)

Katsoulieris, E., et al. Lipotoxicity in renal proximal tubular cells: relationship between endoplasmic reticulum stress and oxidative stress pathways. Free Radic Biol Med 48(12), 1654-1662, (2010), DOI: 10.1016/j.freeradbiomed.2010.03.021 (NucView 488, Microscopy, Cell Line: NRK-52E)

Kawasaki, K., et al. Deletion of the collagen-specific molecular chaperone Hsp47 causes endoplasmic reticulum stress-mediated apoptosis of hepatic stellate cells. J Biol Chem 290(6), 3639-3646, (2015), DOI: 10.1074/jbc.M114.592139 (NucView 488, Microscopy, Cell type: mouse hepatic stellate cells (HSC))

Khalique, H., et al. Oncolytic herpesvirus expressing PD-L1 BiTE for cancer therapy: exploiting tumor immune suppression as an opportunity for targeted immunotherapy. J Immunother Cancer 9(4), (2021), DOI: 10.1136/jitc-2020-001292 (NucView 530 Caspase-3 Substrate, fluorescence microscopy)

Kim, H., et al. Cell cycle dependence of apoptosis photo-triggered using peptide-photosensitizer conjugate. Sci Rep 10(1), 19087, (2020), DOI: 10.1038/s41598-020-76100-7 (NucView 405 Caspase-3 Substrate, fluorescence microscopy)

Kim, J. A., et al. Sensitization of osteosarcoma to irradiation by targeting nuclear FGFR1. Biochem Biophys Res Commun *621*, 101-108, (2022), DOI: 10.1016/j.bbrc.2022.07.002 (NucView 405, microscopy, G292 cells)

King, M. A., et al. Inhibition of cholesterol metabolism underlies synergy between mTOR pathway inhibition and chloroquine in bladder cancer cells. Oncogene, (2016), DOI: 10.1038/onc.2015.511 (NucView 488, Microscopy, Cell line: RT112)

Kleine-Brüggeney, H., et al. A Macro-to-Micro Interface for Performing Comprehensive Microfluidic Cell Culture Assays. Advanced Materials Interfaces *8*, (2021), DOI: 10.1002/admi.202100785 (NucView 530, timelapse microscopy, MCF7 human breast adenocarcinoma, MDA-MB-231)

Klotz, D. M., et al. The microtubule poison vinorelbine kills cells independently of mitotic arrest and targets cells lacking the APC tumour suppressor more effectively. J Cell Sci, (2012), DOI: 10.1242/jcs.091843 (NucView 488, Microscopy, U2OS osteosarcoma cell line-time lapse video in supplementary material)

Kobos, R., et al. Combining integrated genomics and functional genomics to dissect the biology of a cancer-associated, aberrant transcription factor, the ASPSCR1-TFE3 fusion oncoprotein. J Pathol 229(5), 743-754, (2013), DOI: 10.1002/path.4158 (NucView 488, Microscopy, Cell line: FU-UR-1 (renal cell carcinoma))

Koerner, C., et al. microRNA-31 sensitizes human breast cells to apoptosis by direct targeting of protein kinase C epsilon (PKC{varepsilon}). J Biol Chem, (2013), DOI: 10.1074/jbc.M112.414128 (NucView 488, Microscopy, Cell lines: MCF10A, MDA-MB-231 (human breast cancer))

Kovac, S., et al. Seizure activity results in calcium- and mitochondria-independent ROS production via NADPH and xanthine oxidase activation. Cell Death Dis 5, e1442, (2014), DOI: 10.1038/cddis.2014.390 (NucView 488, Microscopy, Cell type: cortical neurons)

Kujjo, L. L., et al. RAD51 plays a crucial role in halting cell death program induced by ionizing radiation in bovine oocytes. Biol Reprod 86(3), 76, (2012), DOI: 10.1095/biolreprod.111.092064 (NucView 488, Microscopy, Cell types: bovine and mouse oocytes)

Lanz, H. L., et al. Mitotic catastrophe triggered in human cancer cells by the viral protein apoptin. Cell Death Dis 4, e487, (2013), DOI: 10.1038/cddis.2013.2 (NucView 488, Microscopy, Cell line: U2OS, Saos-2 (human osteosarcoma))

Lee, Y. C., et al. Targeting Constitutively Activated beta1 Integrin inhibits Prostate Cancer Metastasis. Mol Cancer Res, (2013), DOI: 10.1158/1541-7786.MCR-12-0551 (NucView 488, Microscopy)

Lefort, R., et al. Cross-Linking of Cell Surface Amyloid Precursor Protein Leads to Increased beta-Amyloid Peptide Production in Hippocampal Neurons: Implications for Alzheimer's Disease. J Neurosci 32(31), 10674-10685, (2012), DOI: 10.1523/JNEUROSCI.6473-11.2012 (NucView 488, Microscopy, Cell type: primary rat hippocampal neurons)

Leuenroth, S. J., et al. Triptolide is a traditional Chinese medicine-derived inhibitor of polycystic kidney disease. Proc Natl Acad Sci U S A 104(11), 4389-4394, (2007), DOI: 10.1073/pnas.0700499104 (NucView 488, Microscopy, Cell types: primary mouse kidney epithelial cells)

Levy, D., et al. Short-term effects of 7-ketocholesterol on human adipose tissue mesenchymal stem cells in vitro. Biochem Biophys Res Commun, (2014), DOI: 10.1016/j.bbrc.2014.01.132 (NucView 488, Microscopy, Cell type: human adipose mesenchymal stem cells)

Lim, S. O., et al. Deubiquitination and Stabilization of PD-L1 by CSN5. Cancer Cell, (2016), DOI: 10.1016/j.ccell.2016.10.010 (NucView 488, Microscopy, Cell line: B549)

Liu, W., et al. Heterotypic 3D tumor culture in a reusable platform using pneumatic microfluidics. Lab Chip 16(21), 4106-4120, (2016), DOI: 10.1039/c6lc00996d (NucView 488, Microscopy, Cell lines: HepG2, U-251 MG, MKN-45, NIH 3T3)

Liu, W., et al. Monitoring tumor response to anticancer drugs using stable three-dimensional culture in a recyclable microfluidic platform. Anal Chem 87(19), 9752-9760, (2015), DOI: 10.1021/acs.analchem.5b01915 (NucView 488, Microscopy, Cell line: U251 (glioblastoma))

Lu, B., et al. Identification of NUB1 as a suppressor of mutant Huntingtin toxicity via enhanced protein clearance. Nat Neurosci, (2013), DOI: 10.1038/nn.3367 (NucView 488 caspase-3, microscopy, cell type: mouse striatal cells)

Majewska, E., et al. The influence of uremic high cystatin C concentration on neutrophil apoptosis and selected neutrophil functions isolated from healthy subjects. Med Sci Monit 18(11), CR667-673, (2012), (NucView 488, Microscopy, Cell type: Primary human neutrophils)

Manas, A., et al. The functional domains for Bax2 aggregate-mediated caspase 8-dependent cell death. Exp Cell Res 359(2), 342-355, (2017), DOI: 10.1016/j.yexcr.2017.08.016 (NucView 530 Caspase-3 Substrate, fluorescence microscopy, cell line: HCT116)

Mankus, C., et al. Corneal Epithelium Expresses a Variant of P2X(7) Receptor in Health and Disease. PLoS One 6(12), e28541, (2011), DOI: 10.1371/journal.pone.0028541 (NucView 488, Microscopy)

Mau, M., et al. Effects of dietary isoflavones on proliferation and DNA integrity of myoblasts derived from newborn piglets. Pediatr Res 63(1), 39-45, (2008), DOI: 10.1203/PDR.0b013e31815b8e60 (NucView 488, Microscopy, Cell type: primary porcine myoblasts)

Merino, M. M., et al. A role for Flower and cell death in controlling morphogen gradient scaling. Nat Cell Biol *24*, 424-433, (2022), DOI: 10.1038/s41556-022-00858-3 (NucView 530, NucView 488, microscopy, Drosophila larvae)

Merlet, E., et al. miR-424/322 regulates vascular smooth muscle cell phenotype and neointimal formation in the rat. Cardiovasc Res, (2013), DOI: 10.1093/cvr/cvt045 (NucView 488, Microscopy, Cell type: primary rat vascular smooth muscle)

Moore, M. J., et al. An alternative splicing network links cell-cycle control to apoptosis. Cell 142(4), 625-636, (2010), DOI: 10.1016/j.cell.2010.07.019 (NucView 488, Microscopy, Cell line: HeLa)

Mori, Y., et al. Extracellular ATP facilitates cell extrusion from epithelial layers mediated by cell competition or apoptosis. Curr Biol *32*, 2144-2159 e2145, (2022), DOI: 10.1016/j.cub.2022.03.057 (NucView 530, time lapse imaging, microscopy, MDCK)

Murdock, M. H., et al. A liquid fraction of extracellular matrix inhibits glioma cell viability in vitro and in vivo. Oncotarget, (2022), DOI: 10.18632/oncotarget.28203 (NucView 488, glioma cells, timelapse imaging, microscopy)

Naghibi, F., et al. Cytotoxic activity evaluation of some medicinal plants, selected from Iranian traditional medicine Pharmacopoeia to treat cancer and related disorders. J Ethnopharmacol, (2014), DOI: 10.1016/j.jep.2014.05.025 (NucView 488, Microscopy, Cell line: MCF7)

Nakayama Wong, L. S., et al. Differential cellular responses to protein adducts of naphthoquinone and monocrotaline pyrrole. Chem Res Toxicol 23(9), 1504-1513, (2010), DOI: 10.1021/tx1002436 (NucView 488, Microscopy, Cell type: bronchial epithelial)

Olivera-Martinez, I., et al. Loss of FGF-Dependent Mesoderm Identity and Rise of Endogenous Retinoid Signalling Determine Cessation of Body Axis Elongation. PLoS Biol 10(10), e1001415, (2012), DOI: 10.1371/journal.pbio.1001415 (NucView 488, Microscopy, Cell Line: Chick embryos)

Ousingsawat, J., et al. Anoctamin 6 mediates effects essential for innate immunity downstream of P2X7 receptors in macrophages. Nat Commun 6, 6245, (2015), DOI: 10.1038/ncomms7245 (NucView 488, Microscopy, Cell type: primary mouse macrophages)

Overmeyer, J. H., et al. Active ras triggers death in glioblastoma cells through hyperstimulation of macropinocytosis. Mol Cancer Res 6(6), 965-977, (2008), DOI: 10.1158/1541-7786.MCR-07-2036 (NucView 488, Microscopy, Cell types: U251)

Paez, P. M., et al. Regulation of store-operated and voltage-operated Ca2+ channels in the proliferation and death of oligodendrocyte precursor cells by golli proteins. ASN Neuro 1(1), (2009), DOI: 10.1042/AN20090003 (NucView 488, Microscopy, Cell types: Primary mouse oligodendrocytes)

Paez, P. M., et al. Increased expression of golli myelin basic proteins enhances calcium influx into oligodendroglial cells. J Neurosci 27(46), 12690-12699, (2007), DOI: 10.1523/JNEUROSCI.2381-07.2007 (NucView 488, Microscopy, Cell types: N19 conditionally immortalized mouse oligodendrocyte cell line)

Palorini, R., et al. Protein Kinase A Activation Promotes Cancer Cell Resistance to Glucose Starvation and Anoikis. PLoS Genet 12(3), e1005931, (2016), DOI: 10.1371/journal.pgen.1005931 (NucView 488, Microscopy, Cell line: MDA-MB-231)

Paromov, V., et al. Sodium pyruvate modulates cell death pathways in HaCaT keratinocytes exposed to half-mustard gas. Int J Toxicol 30(2), 197-206, (2011), DOI: 10.1177/1091581810390824 (NucView 488, Microscopy, Cell line: HaCaT (keratinocytes))

Pathak, S., et al. Chemical dissection of the link between streptozotocin, O-GlcNAc, and pancreatic cell death. Chem Biol 15(8), 799-807, (2008), DOI: 10.1016/j.chembiol.2008.06.010 (NucView 488, Microscopy, Cell types: Min6)

Pond, K. W., et al. Live-Cell Imaging in Human Colonic Monolayers Reveals Erk Waves Limit the Stem Cell Compartment to Maintain Epithelial Homeostasis. bioRxiv, (2022), DOI: 10.1101/2022.02.23.481374 (live cell imaging, microscopy)

Puigvert, J. C., et al. Cross-talk between integrins and oncogenes modulates chemosensitivity. Mol Pharmacol 75(4), 947-955, (2009), DOI: 10.1124/mol.108.051649 (NucView 488, Microscopy, Cell types: GE11)

Rana, P. S., et al. Evidence for macromolecular crowding as a direct apoptotic stimulus. J Cell Sci 133(9), (2020), DOI: 10.1242/jcs.243931 (NucView 488, microscopy)

Ren, L., et al. Investigation of Hypoxia-induced Myocardial Injury Dynamics in a Tissue Interface Mimicking Microfluidic Device. Anal Chem, (2012), DOI: 10.1021/ac3025812 (NucView 488, Microscopy, Cell line: H9C2)

Renjini, A. P., et al. STAT3 and Mcl-1 unite to cause mesenchymal epithelial transition. J Cell Sci, (2014), DOI: 10.1242/jcs.138214 (NucView 488, Microscopy)

Riches, K., et al. Exploring smooth muscle phenotype and function in a bioreactor model of abdominal aortic aneurysm. J Transl Med 11, 208, (2013), DOI: 10.1186/1479-5876-11-208 (NucView 488 caspase-3 substrate, Cell line: human porcine smooth muscle cells; Incucyte®, microscopy)

Rose, R., et al. Chromatin compaction precedes apoptosis in developing neurons. Commun Biol *5*, 797 (2022), DOI: 10.1038/s42003-022-03704-2 (microscopy, live cell imaging)

Salem, O., et al. The highly expressed 5'isomiR of hsa-miR-140-3p contributes to the tumor-suppressive effects of miR-140 by reducing breast cancer proliferation and migration. BMC Genomics 17, 566, (2016), DOI: 10.1186/s12864-016-2869-x (NucView 488, Microscopy, Cell lines: MDA-MB-231, MDA-MB-468)

Salpeter, S. J., et al. A novel cysteine cathepsin inhibitor yields macrophage cell death and mammary tumor regression. Oncogene, (2015), DOI: 10.1038/onc.2015.51 (NucView 488, Microscopy, Cell type: primary mouse macrophage)

Santo, V. E., et al. Adaptable stirred-tank culture strategies for large scale production of multicellular spheroid-based tumor cell models. J Biotechnol 221, 118-129, (2016), DOI: 10.1016/j.jbiotec.2016.01.031 (NucView 488, Microscopy, Cell lines: multiple human cancer cell lines; spheroids)

Saw, T. B., et al. Topological defects in epithelia govern cell death and extrusion. Nature 544(7649), 212-216, (2017), DOI: 10.1038/nature21718 (NucView 488, Microscopy, Cell line: MDCK)

Schmid, U., et al. Angiotensin II induces DNA damage in the kidney. Cancer Res 68(22), 9239-9246, (2008), DOI: 10.1158/0008-5472.CAN-08-1310 (NucView 488, Microscopy, Cell types: primary mouse kidney epithelial cells)

Schmitt, H., et al. Glucokinase mediates coupling of glycolysis to mitochondrial metabolism but not to beta cell damage at high glucose exposure levels. Diabetologia, (2011), DOI: 10.1007/s00125-011-2133-5 (NucView 488, Microscopy, Cell line: RINm5F and primary rat beta cells)

Shaw, T. N., et al. Perivascular Arrest of CD8+ T Cells Is a Signature of Experimental Cerebral Malaria. PLoS Pathog 11(11), e1005210, (2015), DOI: 10.1371/journal.ppat.1005210 (NucView 488, Microscopy, In vivo mouse brains)

Sirianant, L., et al. Non-essential contribution of LRRC8A to volume regulation. Pflugers Arch, (2016), DOI: 10.1007/s00424-016-1789-6 (NucView 488, Microscopy, Cell line: HeLa)

Smith, G. S., et al. Monitoring cleaved caspase-3 activity and apoptosis of immortalized oligodendroglial cells using live-cell imaging and cleaveable fluorogenic-dye substrates following potassium-induced membrane depolarization. J Vis Exp (59), (2012), DOI: 10.3791/3422 (NucView 488, Microscopy, Cell line: N19 (oligodendrocyte))

Son, M. Y., et al. Unveiling the critical role of REX1 in the regulation of human stem cell pluripotency. Stem Cells 31(11), 2374-2387, (2013), DOI: 10.1002/stem.1509 (NucView 488, Microscopy, Cell types: embryonic stem cells, HFFs)

Song, L., et al. The HDAC Inhibitor Domatinostat Promotes Cell-Cycle Arrest, Induces Apoptosis, and Increases Immunogenicity of Merkel Cell Carcinoma Cells. J Invest Dermatol 141(4), 903-912 e904, (2021), DOI: 10.1016/j.jid.2020.08.023 (NucView 488/MitoView 633 Apoptosis Assay Kit, fluorescence microscopy)

Soriano-Romani, L., et al. Thrombospondin-1 induces differential response in human corneal and conjunctival epithelial cells lines under in vitro inflammatory and apoptotic conditions. Exp Eye Res 134, 1-14, (2015), DOI: 10.1016/j.exer.2015.03.004 (NucView 488, Microscopy, Cell lines: HCE (human corneal epithelial), IOBA-NHC (conjunctival epithelial))

Standiford, L. R., et al. TLR4-dependent GM-CSF protects against lung injury in Gram-negative bacterial pneumonia. Am J Physiol Lung Cell Mol Physiol 302(5), L447-454, (2012), DOI: 10.1152/ajplung.00415.2010 (NucView 488, Microscopy, mouse alveolar epithelial cells)

Stopper, H., et al. Genotoxicity of the neurotransmitter dopamine in vitro. Toxicol In Vitro 23(4), 640-646, (2009), DOI: 10.1016/j.tiv.2009.03.001 Cell types: TK6 (human lymphoblastoid), NRK (rat kidney), PC12 (rat pheochromocytoma)

Tadokoro, T., et al. BMP signaling and cellular dynamics during regeneration of airway epithelium from basal progenitors. Development, (2016), DOI: 10.1242/dev.126656 (NucView 488, Microscopy, Ex vivo mouse trachea)

Takahashi, N., et al. Construction of in vitro patient-derived tumor models to evaluate anticancer agents and cancer immunotherapy. Oncol Lett 21(5), 406, (2021), DOI: 10.3892/ol.2021.12667 (NucView 530 Caspase-3 Substrate, microscopy)

Tang, H. M., and Cheung, P. C. K. Gene expression profile analysis of gallic acid-induced cell death process. Sci Rep 11, 16743, (2021), DOI: 10.1038/s41598-021-96174-1 (NucView 530, HeLa cells, microscopy)

Tang, Y., et al. Differential determinants of cancer cell insensitivity to antimitotic drugs discriminated by a one-step cell imaging assay. J Biomol Screen 18(9), 1062-1071, (2013), DOI: 10.1177/1087057113493804 (NucView 488, Microscopy, 5637 cells; paclitaxel treatment)

Teng, H., et al. Coupling of angiogenesis and neurogenesis in cultured endothelial cells and neural progenitor cells after stroke. J Cereb Blood Flow Metab 28(4), 764-771, (2008), DOI: 10.1038/sj.jcbfm.9600573 (NucView 488, Microscopy, Cell types: Primary rat subventricular zone neural progenitors)

Trisnadi, N. and Barillas-Mury, C. Live In Vivo Imaging of Plasmodium Invasion of the Mosquito Midgut. mSphere 5(5), (2020), DOI: 10.1128/mSphere.00692-20 (NucView 488, microscopy)

Turovsky, E. A., et al. Features of the cytoprotective effect of selenium nanoparticles on primary cortical neurons and astrocytes during oxygen-glucose deprivation and reoxygenation. Sci Rep *12*, 1710, (2022), DOI: 10.1038/s41598-022-05674-1 (NucView 488, microscopy, mouse cerebral cortex)

Tyciakova, S., et al. Genetically engineered mesenchymal stromal cells producing TNFalpha have tumour suppressing effect on human melanoma xenograft. J Gene Med 17(1-2), 54-67, (2015), DOI: 10.1002/jgm.2823 Cell lines: A375, SKBR3, MDA-MB-231, HT29, SKOV3, U87-MG

Urbinati, G., et al. Antineoplastic Effects of siRNA against TMPRSS2-ERG Junction Oncogene in Prostate Cancer. PLoS One 10(5), e0125277, (2015), DOI: 10.1371/journal.pone.0125277 (NucView 488 caspase-3, Cell line: VCaP, Incucyte®, microscopy)

Virtanen, S. S., et al. Adenosine Inhibits Tumor Cell Invasion via Receptor-independent Mechanisms. Mol Cancer Res, (2014), DOI: 10.1158/1541-7786.MCR-14-0302-T (NucView 488, Microscopy, Cell line: PC3)

Volosin, M., et al. Induction of proneurotrophins and activation of p75NTR-mediated apoptosis via neurotrophin receptor-interacting factor in hippocampal neurons after seizures. J Neurosci 28(39), 9870-9879, (2008), DOI: 10.1523/JNEUROSCI.2841-08.2008 (NucView 488, Microscopy, Cell type: rat hippocampal neurons)

Vuorinen, K., et al. Imatinib mesylate inhibits fibrogenesis in asbestos-induced interstitial pneumonia. Exp Lung Res 33(7), 357-373, (2007), DOI: 10.1080/01902140701634827 (NucView 488, Microscopy, Cell types: CCL-190, primary human IPF fibroblasts)

Wang, S., et al. TRAIL and doxorubicin combination induces proapoptotic and antiangiogenic effects in soft tissue sarcoma in vivo. Clin Cancer Res 16(9), 2591-2604, (2010), DOI: 10.1158/1078-0432.CCR-09-2443 (NucView 488, Microscopy, Human soft tissue sarcoma cell lines)

Watanabe, K., et al. Photocontrolled apoptosis induction using precursor miR-664a and an RNA carrier-conjugated with photosensitizer. Sci Rep 11(1), 14936, (2021), DOI: 10.1038/s41598-021-94249-7 (NucView 488 caspase-3 Assay Kit, fluorescence microscopy)

Wetzel-Smith, M. K., et al. A rare mutation in UNC5C predisposes to late-onset Alzheimer's disease and increases neuronal cell death. Nat Med 20(12), 1452-1457, (2014), DOI: nm.3736 [pii] 10.1038/nm.3736 (NucView 488, Microscopy)

Wu, D., et al. Apoptosis of Acanthamoeba castellanii Trophozoites Induced by Oleic Acid. J Eukaryot Microbiol 65(2), 191-199, (2018), DOI: 10.1111/jeu.12454 (NucView 488, Microscopy, Cell type: Acanthamoeba)

Wu, Y. and MacRae, T. H. Truncation attenuates molecular chaperoning and apoptosis inhibition by p26, a small heat shock protein from Artemia franciscana. Biochem Cell Biol 88(6), 937-946, (2010), DOI: 10.1139/O10-143 (NucView 488, Microscopy, Cell line: 293H)

Yamada, K., et al. Impaired nuclear factor erythroid 2-related factor 2 expression increases apoptosis of airway epithelial cells in patients with chronic obstructive pulmonary disease due to cigarette smoking. BMC Pulm Med 16(1), 27, (2016), DOI: 10.1186/s12890-016-0189-1 (NucView 488, cell line: A549, in Incucyte®, microscopy)

Yancey, P. G., et al. Macrophage LRP-1 controls plaque cellularity by regulating efferocytosis and Akt activation. Arterioscler Thromb Vasc Biol 30(4), 787-795, (2010), DOI: 10.1161/ATVBAHA.109.202051 (NucView 488, Microscopy, Primary mouse peritoneal macrophages)

Yang, D., et al. MCP-1-activated monocytes induce apoptosis in human retinal pigment epithelium. Invest Ophthalmol Vis Sci 52(8), 6026-6034, (2011), DOI: 10.1167/iovs.10-7023 (NucView 488, Microscopy, Cell type: human retinal pigmented epithelial)

Yang, D., et al. Association of superoxide anions with retinal pigment epithelial cell apoptosis induced by mononuclear phagocytes. Invest Ophthalmol Vis Sci 50(10), 4998-5005, (2009), DOI: 10.1167/iovs.09-3620 (NucView 488, Microscopy, Cell types: mouse RPE)

Yao, Q., et al. The C-terminus of Ubl4A is critical for pro-death activity and association with the Arp2/3 complex. Biochem Biophys Res Commun 503(4), 3192-3197, (2018), DOI: 10.1016/j.bbrc.2018.08.123 (NucView 530 Caspase-3 substrate, cell type: MEFs)

Yao, Y., et al. A striatal-enriched intronic GPCR modulates huntingtin levels and toxicity. Elife 4, (2015), DOI: 10.7554/eLife.05449 (NucView 488, Microscopy)

Yoshioka, Y., et al. Induction of apoptosis in Caco-2 cells by exogenously added O(2)(-) produced by a nanodevice. Exp Cell Res 331(2), 408-415, (2015), DOI: 10.1016/j.yexcr.2014.12.007 (NucView 488, Microscopy, Cell line: Caco-2)

Zhang, C., et al. PINK1 triggers autocatalytic activation of Parkin to specify cell fate decisions. Curr Biol 24(16), 1854-1865, (2014), DOI: 10.1016/j.cub.2014.07.014 (NucView 488, Microscopy, Cell line: MEFs)

Zhao, W. L., et al. G-protein-coupled receptor kinase 2 terminates G-protein-coupled receptor function in steroid hormone 20-hydroxyecdysone signaling. Sci Rep 6, 29205, (2016), DOI: 10.1038/srep29205 (NucView 488, Microscopy, Cell line: HaEpi (insect cells))

Zhou, Y., et al. Autophagy inhibits chemotherapy-induced apoptosis through downregulating Bad and Bim in hepatocellular carcinoma cells. Sci Rep 4, 5382, (2014), DOI: 10.1038/srep05382 (NucView 488, Microscopy, Cell line: SMMC-7721 (hepatocellular carcinoma))

Zhu, Q. S., et al. Soft tissue sarcoma cells are highly sensitive to AKT blockade: a role for p53-independent up-regulation of GADD45 alpha. Cancer Res 68(8), 2895-2903, (2008), DOI: 10.1158/0008-5472.CAN-07-6268 (NucView 488, Microscopy, Cell types: human soft tissue sarcoma cell lines)

Incucyte®

Eriksson, A., et al. The novel tyrosine kinase inhibitor AKN-028 has significant antileukemic activity in cell lines and primary cultures of acute myeloid leukemia. Blood Cancer J 2, e81, (2012), DOI: 10.1038/bcj.2012.28 (NucView 488 caspase-3 substrate, Incucyte®, microscopy, cell line: MV4-11 (primary human leukemia))

Gouarderes, S., et al. Electroporation does not affect human dermal fibroblast proliferation and migration properties directly but indirectly via the secretome. Bioelectrochemistry 134, 107531, (2020), DOI: 10.1016/j.bioelechem.2020.107531 (MitoView 633, Incucyte®)

Hafner, M., et al. Growth rate inhibition metrics correct for confounders in measuring sensitivity to cancer drugs. Nat Methods 13(6), 521-527, (2016), DOI: 10.1038/nmeth.3853 (NucView 488 caspase 3 substrate, Incucyte®, microscopy, cell line: MCF10a)

Johnston, H. J., et al. Naturally Inspired Peptide Leads: Alanine Scanning Reveals an Actin-Targeting Thiazole Analogue of Bisebromoamide. Chembiochem 17(17), 1621-1627, (2016), DOI: 10.1002/cbic.201600257 (NucView 488, Incucyte®, microscopy, Cell line: HCT116)

Lu, B., et al. Identification of NUB1 as a suppressor of mutant Huntingtin toxicity via enhanced protein clearance. Nat Neurosci, (2013), DOI: 10.1038/nn.3367 (NucView 488 caspase-3, microscopy, cell type: mouse striatal cells)

Riches, K., et al. Exploring smooth muscle phenotype and function in a bioreactor model of abdominal aortic aneurysm. J Transl Med 11, 208, (2013), DOI: 10.1186/1479-5876-11-208 (NucView 488 caspase-3 substrate, Cell line: human porcine smooth muscle cells; Incucyte®, microscopy)

Urbinati, G., et al. Antineoplastic Effects of siRNA against TMPRSS2-ERG Junction Oncogene in Prostate Cancer. PLoS One 10(5), e0125277, (2015), DOI: 10.1371/journal.pone.0125277 (NucView 488 caspase-3, Cell line: VCaP, Incucyte®, microscopy)

Yamada, K., et al. Impaired nuclear factor erythroid 2-related factor 2 expression increases apoptosis of airway epithelial cells in patients with chronic obstructive pulmonary disease due to cigarette smoking. BMC Pulm Med 16(1), 27, (2016), DOI: 10.1186/s12890-016-0189-1 (NucView 488, cell line: A549, in Incucyte®, microscopy)

Microplate

Chen, Y., et al. Dual autonomous mitochondrial cell death pathways are activated by Nix/BNip3L and induce cardiomyopathy. Proc Natl Acad Sci U S A 107(20), 9035-9042, (2010), DOI: DOI:10.1073/pnas.0914013107 (NucView 488, microplate, Primary mouse embryonic fibroblast (MEF) cells)

El Khoury, R., et al. Demonstration of doxorubicin's cardiotoxicity and screening using a 3D bioprinted spheroidal droplet-based system. RSC Adv *13*, 8338-8351, (2023), DOI: 10.1039/d3ra00421j (NucView 488, microplate, cardiomyocytes (CMs))

Monaco, G., et al. Selective regulation of IP3-receptor-mediated Ca2+ signaling and apoptosis by the BH4 domain of Bcl-2 versus Bcl-Xl. Cell Death Differ 19(2), 295-309, (2012), DOI: 10.1038/cdd.2011.97 (NucView 488 Caspase-3 Kit, microplate, Cell line: WEHI 7.2 (murine lymphoid))

Ramakrishnan, V., et al. Minnelide, a prodrug, inhibits cervical cancer growth by blocking HPV-induced changes in p53 and pRb. Am J Cancer Res 11(5), 2202-2214, (2021), (NucView 488, microplate)

Tanne, Y., Tanimoto, K., Okuma, S., Kunimatsu, R., Hirose, N., Mitsuyoshi, T., Tanne, K. Effects of hyaluronan oligosaccharides on apoptosis of human gingival fibroblasts.. Open Journal of Stomatology 3, 19-24, (2013), (NucView 488 Caspase-3 Assay Kit, microplate, Cell type: human gingival fibroblasts)

Uddin, M. I., et al. Applications of azo-based probes for imaging retinal hypoxia. ACS Med Chem Lett 6(4), 445-449, (2015), DOI: 10.1021/ml5005206 (NucView 488, microplate, cell line: R28)

Yuichi Miki, J. A., et al. Evaluation of laser irradiance on photodynamic therapy using talaporfin sodium-induced glioblastoma T98G cell death. Fundamental Toxicological Sciences *2*, 111-116, (2015), DOI: 10.2131/fts.2.111 (NucView 488, glioblastoma T98G cell, microplate)

Zhang, Y., et al. alpha-Linolenic acid prevents endoplasmic reticulum stress-mediated apoptosis of stearic acid lipotoxicity on primary rat hepatocytes. Lipids Health Dis 10(1), 81, (2011), DOI: 10.1186/1476-511X-10-81 (NucView 488 Caspase-3 Substrate kit, microplate)

Imaging Cytometer

Camacho-Moll, M. E., et al. The oncogene Gankyrin is expressed in testicular cancer and contributes to cisplatin sensitivity in embryonal carcinoma cells. BMC Cancer 19(1), (2019), DOI: 10.1186/s12885-019-6340-7 (NucView 488, NTera2 embyonal carcinoma cells, microscopy)

Folkesson, E., et al. High-throughput screening reveals higher synergistic effect of MEK inhibitor combinations in colon cancer spheroids. Sci Rep 10(1), 11574, (2020), DOI: 10.1038/s41598-020-68441-0 (NucView 488 Caspase-3 Substrate, colon cancer spheroids, imaging cytometer)

Lane, B. M., et al. A Rare Autosomal Dominant Variant in Regulator of Calcineurin Type 1 (RCAN1) Gene Confers Enhanced Calcineurin Activity and May Cause FSGS. J Am Soc Nephrol, (2021), DOI: 10.1681/ASN.2020081234 (Nucview 488 Caspase-3 substrate, imaging)

Luke, C. J., et al. Lysoptosis is an evolutionarily conserved cell death pathway moderated by intracellular serpins. Commun Biol 5, 47, (2022), DOI: 10.1038/s42003-021-02953-x (NucView 530, HT3B3-KO and HT3B3-WT cells, imaging cytometer, Acridine orange)

Oliemuller, E., et al. SOX11 promotes invasive growth and ductal carcinoma in situ progression. J Pathol 243(2), 193-207, (2017), DOI: 10.1002/path.4939 (NucView-488 Caspase-3 substrate, imaging, spheroids)

Radke, K., et al. Anti-tumor effects of rigosertib in high-risk neuroblastoma. Transl Oncol 14(8), 101149, (2021), DOI: 10.1016/j.tranon.2021.101149 (Nucview 405, FACSverse flow cytometer)

Witten, L. W., et al. miR-155 drives oncogenesis by promoting and cooperating with mutations in the c-Kit oncogene. Oncogene 38(12), 2151-2161, (2019), DOI: 10.1038/s41388-018-0571-y (NucView 530, Celigo microplate imaging cytometer)

NucView® Validated Cell Lines

Immortalized cell lines used with NucView® 405

Cell line	Species	Cell type	References
344SQ_Z-cad	Mouse	Lung cancer	Konen et al. 2021
A375	Human	Melanoma	Filali et al. 2022
BMDC	Mouse	CD4 T cell	Morelli et al. 2020
DLD1	Human	Colon cancer	Grabocka et al. 2016
G929	Human	Osteosarcoma	Kim et al. 2022
HeLa	Human	Cervical cancer	Grabocka et al. 2016
HeLa/Fucci2	Human	Cervical cancer	Kim et al. 2020
MCF-7	Human	Breast cancer	Ichimaru et al. 2020
NCI-H508	Human	Cecum adenocarcinoma	Grabocka et al. 2016
PDX	Human	Neuroblastoma	Radke et al. 2021
RH4	Human	Rhabdomyosarcoma	Bohm et al. 2016
Saos-2	Human	Osteosarcoma	Globig et al. 2022

Immortalized cell lines used with NucView® 488

Cell line	Species	Cell type	References
293-H	Human	Embryonic kidney	Wu and MacRae 2010
293-T	Human	Embryonic kidney	Ben Salem et al. 2015; Boussabbeh et al. 2015; Boussabbeh et al. 2015 (2); Li et al. 2008; Wetzel-Smith et al. 2014
4T1	Mouse	Mammary tumor	Granot et al. 2011
5637	Human	Bladder carcinoma	Brassesco et al. 2013 (A); Tang et al. 2013
67NR	Mouse	Mammary carcinoma	Cheng et al. 2009
A172	Human	Glioma	Jeong et al. 2009; Murdock et al. 2022
A204	Human	Sarcoma	Zhu et al. 2008
A375	Human	Melanoma	Feng et al. 2016; Takata et al. 2017; Tyciakova et al. 2015
A549	Human	Adenocarcinoma	Yamada et al. 2016
B16F10	Mouse	Melanoma	Ferreira et al. 2011
BeWo	Human	Trophoblast	Angeloni et al. 2009
BT549	Human	Breast cancer	Lim et al. 2016
Caco-2	Human	Colorectal	Yoshioka et al. 2014
CaSki	Human	Cervical cancer	Ramakrishnan et al. 2021
CCL-134	Human	IPF pulmonary fibroblast	Vuorinen et al. 2007
CCL-190	Human	Pulmonary fibroblast	Vuorinen et al. 2007
CCL-227	Human	Colon	Arsic et al. 2017

CCL-228	Human	Colon	Arsic et al. 2017
CCRF-CEM	Human	Leukemia	Dahlawi et al. 2013, Pedroza et al. 2014
FU-UR-1	Human	Renal cell carcinoma	Kobos et al. 2013
G-361	Human	Melanoma	Aronchik et al. 2014 (2)
GE11	Mouse	Epithelial	Puigvert et al. 2009
H358	Human	Non-small cell lung cancer	Aronchik et al. 2014
H9c2	Rat	Cardiac myoblast	Ben Salem et al. 2017; He et al. 2014; Prola et al. 2016; Ren et al. 2012
HaCaT	Human	Keratinocyte	Paromov et al. 2011
HaEpi	Insect	Epidermal	Chen et al. 2017; Zhao et al. 2016
HCE	Human	Corneal epithelial	Soriano-Romani et al. 2015
HCLE	Human	Corneal epithelial	Mankus et al. 2011
HCT116	Human	Colorectal carcinoma	Aftab et al. 2014; Ben Salem et al. 2015; Boussabbeh et al. 2015; Boussabbeh et al. 2015 (2); Johnston et al. 2016; Manas et al. 2017
HEK293	Human	Embryonic kidney	Lane et al 2021
HeLa	Human	Cervical cancer	Angeloni et al. 2009; Antczak et al. 2009; Balzarini et al. 2013; Cen et al. 2008; Chiu et al. 2016; Gallerne et al. 2013; Gao et al. 2014; Kasim et al. 2013; Moore et al. 2010; Sirianant et al. 2016; Verma et al. 2013; Watanabe et al. 2021; Rana et al. 2021
HepG2	Human	Liver carcinoma	Chiu et al. 2016; Liu et al. 2016
HepT1	Human	Hepatoblastoma	Dewerth et al. 2012; Eicher et al. 2011
HMEC	Human	Microvascular endothelial	Isherwood et al. 2011
hMSC	Human	Mesenchymal stem cell	Cunha et al. 2015
HL-60	Human	Leukemia	Contreras et al. 2018; Dahlawi et al. 2013
HOS	Human	Osteosarcoma	Brassesco et al. 2013; Takata et al. 2017
HT-29	Human	Colorectal adenocarcinoma	Tyciakova et al. 2015
HT-1080	Human	Breast fibrosarcoma	Wang et al. 2010; Zhu et al. 2008
HUH6	Human	Hepatoblastoma	Dewerth et al. 2012; Eicher et al. 2011
IMR-90	Human	Lung	Baar et al. 2017
INS-IE	Mouse	Pacreatic islet	Shulga et al. 2015
IOBA-NHC	Human	Conjunctival epithelial	Soriano-Romani et al. 2015
Jurkat	Human	T-lymphocyte	Cen et al. 2008; Li and Shively 2013; Oldham et al. 2015; Stewart et al. 2010; Coêlho et al. 2014
JY	Human	Lymphoblastic leukemia	Berenyi et al. 2011
K562	Human	Myelogenous leukaemia	Sztiller-Sikorska et al. 2009
MCF-7	Human	Breast adenocarcinoma	Balijepalli et al. 2010; Hamzeloo-Moghadam et al. 2015; Naghibi et al. 2014; Renjini et al. 2014; Chung et al. 2019; Hamzeloo-Moghadam et al. 2015
MCF-10A	Human	Breast adenocarcinoma	Hafner et al. 2016; Koerner et al. 2013
MDA-MB-231	Human	Breast adenocarcinoma	Aronchik et al. 2011; Aronchik et al. 2014; Balijepalli et al. 2010; Bueno et al. 2018; Koerner et al. 2013;

			Palorini et al. 2016; Robles-Escajeda et al. 2016; Salem et al. 2016; Tyciakova et al. 2015
MDA-MB-361	Human	Breast cancer	Gao et al. 2017
MDA-MB-468	Human	Breast cancer	Jangmareddy et al. 2013 (NucView & MitoView Kit); Salem et al. 2016
MDCK	Canine	Kidney epithelial	Eisenhoffer et al. 2012; Saw et al. 2017; Ranae et al. 2021
ME-180	Human	Cervical cancer	Ramakrishnan et al. 2021
MES-SA	Human	Uterine sarcoma	Zhu et al. 2008
MES-SA/DX	Human	Uterine sarcoma	Zhu et al. 2008
MG-63	Human	Osteosarcoma	Brassesco et al. 2013
Min 6	Mouse	Pancreatic insulinoma	Hofmeister-Brix et al. 2013; Pathak et al. 2008
MKN-45	Human	Gastric cancer	Liu et al. 2016
MOLT-3	Human	Leukemia	Dahlawi et al. 2013
MV4-11	Human	Macrophage	Eriksson et al. 2012
Nalm-6	Human	B cell	Robles-Escajeda et al. 2013
N19	Mouse	Oligodendrocyte	Paez et al. 2007; Smith et al. 2012
NIH 3T3	Mouse	Fibroblast	Liu et al. 2016
NRK	Rat	Kidney epithelial	Stopper et al. 2009
NRK-52E	Rat	Kidney epithelial	Katsoulieris et al. 2010
NTera2	Human	Embryonic carcinoma	Camacho-Moll et al. 2019
OECM-1	Human	Oral cancer	Su et al. 2017
Ova-Tr1	Human	Ovalbumin	Guipouy et al. 2019
OVK18	Human	Ovarian cancer	De et al. 2018
PC-3	Human	Prostate cancer	Balzarini et al. 2013; Bjork et al. 2015 (3D culture); Bjorkman et al. 2011; Lee et al. 2013; Virtanen et al. 2014
PC-9	Human	Non-small cell lung cancer	Dereli-Korkut et al. 2014
PC12	Rat	Pheochromocytoma	Stopper et al. 2009
Ramos	Human	B cell lymphoma	Contreras et al. 2018
R28	Rat	Retinal precursors	Uddin et al. 2015
RD	Human	Rhabdomyosarcoma	Zhu et al. 2008
RINm5F	Rat	Insulinoma	Schmitt et al. 2011
RKO	Human	Colon carcinoma	Cai et al. 2013
RT4	Human	Bladder carcinoma	Brassesco et al. 2013 (A)
RT112	Human	Bladder carcinoma	King et al. 2016
SAS	Human	Oral carcinoma	Su et al. 2017
Saos-2	Human	Osteosarcoma	Lanz et al. 2013
SiHa	Human	Cervical cancer	Ramakrishnan et al. 2021
SKBR3	Human	Breast cancer	Jangamreddy et al. 2013 (NucView & MitoView Kit); Tyciakova et al. 2015
SKLMS1	Human	Leiomyosarcoma	Wang et al. 2010; Zhu et al. 2008
SK-OV-3	Human	Ovarian carcinoma	Tyciakova et al. 2015

SMMC-7721	Human	Hepatocarcinoma	Zhou et al. 2014
SP2/0-AG14	Mouse	Hybridoma	Macsik et al. 2015
STHdh	Mouse	Striatal cells	Lu et al. 2013
SW684	Human	Fibrosarcoma	Zhu et al. 2008
SW872	Human	Liposarcoma	Zhu et al. 2008
T24	Human	Bladder carcinoma	Brassesco et al. 2013 (A)
T98G	Human	Glioblastoma	Yuichi Miki et al. 2015
THP-1	Human	Monocyte	Cestari et al. 2012; Dahlawi et al. 2013
TK6	Human	Splenic lymphoblast	Stopper et al. 2009
U2OS	Human	Osteosarcoma	Benetti and Roizman 2007; Klotz et al. 2012; Lanz et al. 2013
U-251 MG	Human	Glioblastoma	Liu et al. 2015; Liu et al. 2016; Overmeyer et al. 2008
U-373 MG	Human	Glioblastoma	Jones and Howl 2011
U-87 MG	Human	Glioblastoma	Cribbes et al. 2017; Tyciakova et al. 2015
U937	Human	Lymphoma	Wang et al. 2013
VCaP	Human	Prostate cancer	Alinezhad et al. 2014; Urbinati et al. 2015
WEHI 7.2	Mouse	Lymphoid	Monaco et al. 2012

Immortalized cell lines used with NucView® 530

Cell line	Species	Cell type	References
DLD-1	Human	Colorectal adenocarcinoma	Khalique et al. 2021
F-PDO	Human	Hematopoietic tumor	Takahashi et al. 2021
HCT116	Human	Colorectal carcinoma	Manas et al. 2017
HeLa	Human	Cervical cancer	Tang et al. 2021
HT-29	Human	Colorectal cancer	Brinkman 2021
HT-3	Human	Cervical Carcinoma	Luke et al. 2022
MCF-7	Human	Breast adenocarcinoma	Kleine-Brüggeney et al. 2021
MDA-MB-231	Human	Breast adenocarcinoma	Bueno et al. 2018
MDCK	Canine	Kidney epithelial	Mori et al. 2022
MEFs	Mouse	Embryonic fibroblast	Yao et al. 2018; Zhang et al. 2020

Primary cell types used with NucView® 488

Cell type	Species	References
Amoeba	Acanthamoeba	Wu et al. 2017
Adipose mesenchymal stem cells	Human	Levy et al. 2014; Park et al. 2011
Alveolar epithelial cells	Mouse	Standiford et al. 2012
Astrocyte	Rat	Angelova et al. 2016
B cells	Mouse	Zhang et al. 2013
Brain (whole, ex vivo)	Mouse	Shaw et al. 2015
Cardiomyocytes	Human	El Khoury et al. 2023

Cerebral Cortex	Mouse	Turovsky et al. 2022
Cortical neurons	Rat	Kamynina et al. 2013; Kovac et al. 2014
Dendritic cells	Mouse	Brodsky and Medzhitov 2008
Drosophilia Larvae	Fruit Fly	Merino et al. 2022
Embryonic fibroblast (MEF)	Mouse	Chen et al. 2010; Handa et al. 2011; Yao et al. 2018; Zhang et al. 2014
Embryonic stem cells (H9)	Human	Son et al. 2013
Embryo tailbud	Chicken	Olivera-Martinez et al. 2012
Fibroblasts, primary	Human	Dikovskya et al. 2015; Kato et al. 2013
Foreskin fibroblasts (HFF)	Human	Cunha et al. 2015; Son et al. 2013
Gingival fibroblasts	Human	Tanne et al. 2013
Glia	Rat	Kamynina et al. 2013
Hemocytes	Silkworm (*Bombyx mori)*	Ishii et al. 2012
Hepatocytes	Rat, Mouse	Kawasaki et al. 2015; Kopek et al. 2017; Zhang et al. 2011
Hippocampal neurons	Rat	Lefort et al. 2012; Kamynina et al. 2013; Volosin et al. 2008; Davies et al. 2022
Idiopathic pulmonary fibrosis fibroblasts	Human	Vuorinen et al. 2007
Immature B cells	Mouse	Claudio et al. 2009
iPS-derived neurons	Human	Yao et al. 2015
Kidney epithelial cells	Mouse	Leuenroth et al. 2007; Schmid et al. 2008
Trypanosome	Leishmania	Awasthi et al. 2016; Kathuria et al. 2014
Macrophages	Mouse	Brodsky and Medzhitov 2008; Ousingsawat et al. 2015; Salpeter et al. 2015
Mammary epithelial cells	Mouse	Jechlinger et al. 2009
Mammary luminal progenitor cells	Human	Knapp et al. 2017
Myoblasts	Pig	Mau et al. 2008
Neutrophils	Human	Amendola et al, 2015; Majewska et al. 2012
Neural progenitor cells	Human	Gualda et al. 2014
Neurons, primary	Human	Balez et al. 2016
Neurons, primary	Mouse	Cheli et al. 2015
SVZ neural progenitor cells	Rat	Teng et al. 2008
Oligodendrocytes	Mouse	Clausi et al. 2012; Paez et al. 2009
Oligodendrocyte progenitor cells	Mouse	Cheli et. al. 2014; Guardia et al. 2012
Oocytes	Bovine, mouse	Kujjo et al. 2012
Pancreatic acinar cells	Mouse	Adhikari et al. 2008
Pancreatic beta cells	Rat	Dufer et al. 2011; Schmitt et al. 2011
Pancreatic islet cells	Mouse	Gier et al. 2009
Peritoneal macrophages	Mouse	Hanley et al. 2012; Yancey et al. 2010
Pollen tubes	Field poppy (*Papaver rhoeas*)	Bosch and Franklin-Tong 2007
Retinal pigmented epithelial cells	Human, mouse	Yang et al. 2009; Yang et al. 2011

Skin fibroblasts	Sand cat (*Felis margarita*)	Gomez et al. 2008
Skin biopsy cells	Human	De Sica et al. 2016
Smooth muscle cells	Pig	Riches et al. 2013
Stem cells	Human	Choo and Fong 2013; Cunha et al. 2015
Thymocytes	Mouse	Tribulatti et al. 2007
T-lymphocytes	Human	Valente et al. 2014
Umbilical vein endothelial cells	Human	Geng et al. 2009
Vascular endothelial cells	Rat	Merlet et al. 2013

Primary cell types used with NucView® 530

Cell type	Species	References
Drosophilia Larvae	Fruit Fly	Merino et al. 2022
Embryonic fibroblast (MEF)	Mouse	Yao et al. 2018

3D cell culture used with NucView® 488

Cell system	References
3D PC3 cell culture	Bjork et al. 2015
3D PC9 cell culture	Dereli-Korkut et al. 2014
3D primary mouse epithelium cell culture	Jechlinger et al. 2009
VCaP organoids	Alinezhad et al. 2014
U-87 MG 3D spheroids	Cribbes et al. 2017
HT-29 3D spheroids	Santo et al. 2016; Folkesson et al. 2020
Neural 3D aggregates	Gualda et al. 2014
H9c2 cells-on-chip	He et al. 2014
MKN-45 3D cells-on-chip	Liu et al. 2016
3D HCT-116 culture	Folkesson et al. 2020
3D SW-620 culture	Folkesson et al. 2020
Ex vivo mouse brain	Shaw et al. 2015
Ex vivo mouse trachea	Tadokoro et al. 2016