

MTT Cell Viability Assay Kit

Catalog # KA1606

Size 1 Kit

Applications

Result Data

Result Data

□

Linear relationship between Blue fluorescence and cell number in HEK293 cells.

Specification

Product Description	MTT Cell Viability Assay Kit is a non-radioactive colorimetric assay for cell proliferation and cytotoxicity.
Suitable Sample	Cell Culture.
Detection Method	Colorimetric
Limit of Detection	950 - 55,000 cells
Regulation Status	For research use only (RUO)
Storage Instruction	Store the Reagent at -20°C. Solubilization Solution can be stored at room temperature.
Note	Result Data Result Data Linear relationship between Blue fluorescence and cell number in HEK293 cells.

Applications

- Functional Study

Publication Reference

- [HSF-1/miR-145-5p transcriptional axis enhances hyperthermic intraperitoneal chemotherapy efficacy on peritoneal ovarian carcinosis.](#)

Silvia Di Agostino, Valeria Canu, Sara Donzelli, Claudio Pulito, Andrea Sacconi, Federica Ganci, Fabio Valenti, Frauke Goeman, Stefano Scalera, Francesca Rollo, Anna Bagnato, Maria Grazia Diodoro, Enrico Vizza, Mariantonia Carosi, Beatrice Rufini, Orietta Federici, Manuel Giofrè, Fabio Carboni, Paola Muti, Gennaro Ciliberto, Sabrina Strano, Mario Valle, Giovanni Blandino.

Cell Death & Disease 2023 Aug; 14(8):535.

Application: Func, Human, NIH:OVCAR-3

- [MCP-1-Functionalized, Core-Shell Gold Nanorod@Iron-Based Metal-Organic Framework \(MCP-1/GNR@MIL-100\(Fe\)\) for Photothermal Therapy.](#)

Wei-Cheng Chien, Po-Hsiu Cheng, Xu-Jun Cheng, Chi-Cheng Chuang, Yu-Ting Huang, Anilkumar T S, Chia-Hung Liu, Yu-Jen Lu, Kevin C-W Wu.

ACS Applied Materials & Interfaces 2021 Aug; 13(44):52092.

Application: Func, Human, U251 cells

- [Sevoflurane promotes the proliferation of HUVECs by activating VEGF signaling.](#)

Zengtao Wang, Cui Wu, Min Zhang, Aiping Dong, Ruibin Niu, Jie Zhang.

Experimental and Therapeutic Medicine 2020 Feb; 19(2):1336.

Application: Func, Human, HUVECs

- [Autophagy inhibition induces the repolarisation of tumour-associated macrophages and enhances chemosensitivity of laryngeal cancer cells to cisplatin in mice.](#)

Guo Y, Feng Y, Cui X, Wang Q, Pan X.

Cancer Immunology, Immunotherapy 2019 Dec; 68(12):1909.

Application: Func, Human, Hep-2 cells

- [Proapoptotic effects of 2,5-hexanedione on pheochromocytoma cells via oxidative injury.](#)

Qi B, Xu S, Liang Y, Wang J, Zhang Z, Li J, Zhou J.

Molecular Medicine Reports 2019 Oct; 20(4):3249.

Application: Func, Human, PC12 cells

- [Influence of Fat on Differential Receptor Interacting Serine/Threonine Protein Kinase 1 Activity Leading to Apoptotic Cell Death in Murine Liver Ischemia Reperfusion Injury Through Caspase 8.](#)

Vasanth L Kolachala, Sirish K Palle, Ming Shen, Asha Shenoi, Dmitry M Shayakhmetov, Nitika A Gupta.

Hepatology Communications 2019 Apr; 3(7):925.

Application: Func, Mouse, Mouse liver

- [Creg in Hepatocytes Ameliorates Liver Ischemia/Reperfusion Injury in a TAK1-Dependent Manner in Mice.](#)

Yang L, Wang W, Wang X, Zhao J, Xiao L, Gui W, Fan H, Xia J, Li Z, Yan J, Alasbahi A, Zhu Q, Hou X.

Hepatology 2018 Aug; [Epub].

Application: Func, Mouse, Hepatocytes

- [Caspase recruitment domain 6 protects against hepatic ischemia/reperfusion injury by suppressing ASK1.](#)

Qin JJ, Mao W, Wang X, Sun P, Cheng D, Tian S, Zhu XY, Yang L, Huang Z, Li H.

Journal of Hepatology 2018 Jun; [Epub].

Application: Func, Mouse, Hepatocytes

- [Monocyte chemoattractant protein-induced protein 1 targets hypoxia-inducible factor 1 \$\alpha\$ to protect against hepatic ischemia/reperfusion injury.](#)

Sun P, Lu YX, Cheng D, Zhang K, Zheng J, Liu Y, Wang X, Yuan YF, Tang YD.

Hepatology (Baltimore, Md.) 2018 May; [Epub].

Application: Func, Mouse, Hepatocytes

- [Tea polyphenols inhibit the proliferation, migration, and invasion of melanoma cells through the down-regulation of TLR4.](#)

Chen X, Chang L, Qu Y, Liang J, Jin W, Xia X.

International Journal of Immunopathology and Pharmacology 2018 Jan; 32:3946320177.

Application: Func, Human, A375, B16F10 cells

- [Dusp14 protects against hepatic ischemia-reperfusion injury via Tak1 suppression.](#)

Wang X, Mao W, Fang C, Tian S, Zhu X, Yang L, Huang Z, Li H.

Journal of Hepatology 2017 Sep; [Epub].

Application: Func, Mouse, Mouse primary hepatocytes

- [Effects of polyhexamethylene guanidine phosphate on human gingival fibroblasts.](#)

Vitt A, Slizen V, Boström EA, Yucel-Lindberg T, Kats A, Sugars RV, Gustafsson A, Buhlin K.

Acta Odontologica Scandinavica 2017 Jul; 12:1.

Application: Func, Human, Human gingival fibroblasts.

- [Underlying mechanism of Sirt1 on apoptosis and extracellular matrix degradation of osteoarthritis chondrocytes.](#)

He DS, Hu XJ, Yan YQ, Liu H.

Molecular Medicine Reports 2017 Jul; 16(1):845.

Application: Func, Human, Osteoarthritis chondrocytes from patients with osteoarthritis

- [Investigations of a Possible Chemical Effect of *Salvadora persica* Chewing Sticks.](#)

Albabbtain R, Azeem M, Wondimu Z, Lindberg T, Borg-Karlson AK, Gustafsson A.

Evidence-Based Complementary and Alternative Medicine : ECAM. 2017 Apr; 2017:2576548.

Application: Func, Human, Human gingival fibroblast

- [Long non-coding RNA AFAP1-AS1 facilitates tumor growth and promotes metastasis in colorectal cancer.](#)

Han X, Wang L, Ning Y, Li S, Wang Z.

Biological Research 2016 Aug; 49(1):36.

Application: Func, Human, SW480 cells

- [Cholesterol Potentiates \$\beta\$ -Amyloid Genesis in Cultured Human Umbilical Vein Endothelial Cells.](#)

Huang G, Xue Z, Hu X, Wan L, Li J, Czi Y, Patrylo PR, Luo X, Pan A, Yan X.

Advances in Alzheimer's Disease 2016 Jun; 5:23.

Application: Func, Human, HUVECs

- [Microtubule modification influences cellular response to amyloid- \$\beta\$ exposure.](#)

Shamitko-Klingensmith N, Boyd JW, Legleiter J.

AIMS Biophysics 2016 May; 3(2):261.

Application: Func, Mouse, GT1-7 hypothalamic neurons

- [Antioxidant and Apoptotic Activity of Papaya Peel Extracts in HepG2 Cells.](#)

Salla S, Sunkara R, Walker LT, Verghese M.

Food and Nutrition Sciences 2016 May; 7(6):485.

Application: Func, Human, HepG2 cells

- [Antioxidant activity of papaya seed extracts against H₂O₂ induced oxidative stress in HepG2 cells.](#)

Swetha Salla, Rajitha Sunkara, Simon Ogutu, Lloyd. T. Walker, Dr. Martha Verghese.

LWT- Food Science and Technology 2016 Mar; 66:293.

Application: Func, Human, HepG2 cells

- [Simvastatin protects cardiomyocytes from doxorubicin cardiotoxicity by suppressing endoplasmic reticulum stress and activating Akt signaling.](#)

Liu D, Liu Y, Yi Z, Dong H.

International Journal of Clinical and Experimental Medicine 2016 Feb; 9(2):2193.

Application: Func, Mouse, Mouse cardiomyocytes

- [Metabolic targeting of oncogene MYC by selective activation of the proton-coupled monocarboxylate family of transporters.](#)

Gan L, Xiu R, Ren P, Yue M, Su H, Guo G, Xiao D, Yu J, Jiang H, Liu H, Hu G, Qing G.

Oncogene 2016 Jun; 35(23):3037.

Application: Func, Human, Neuroblastoma, P493, 293T, MDA-MB-231 cells

- [Targeting TRAF3 signaling protects against hepatic ischemia/reperfusion injury.](#)

Hu J, Zhu XH, Zhang XJ, Wang PX, Zhang R, Zhang P, Zhao GN, Gao L, Zhang XF, Tian S, Li H.

Journal of Hepatology 2016 Jan; 64(1):146.

Application: Func, Mouse, Hepatocytes

- [Mindin deficiency protects the liver against ischemia/reperfusion injury.](#)

Sun P, Zhang P, Wang PX, Zhu LH, Du Y, Tian S, Zhu X, Li H.

Journal of Hepatology 2015 Nov; 63(5):1198.

Application: Func, Mouse, Mouse hepatocytes

- [Age-related intraneuronal accumulation of \$\alpha\$ -spectrin breakdown product SBDP120 in the human cerebrum is enhanced in Alzheimer's disease.](#)

Zhu HX, Xue ZQ, Qiu WY, Zeng ZJ, Dai JP, Ma C, Luo XG, Yan XX.

Experimental Gerontology 2015 Sep; 69:43.

Application: Func, Rat, RGC-5 cells

- [Interferon regulatory factor 9 is an essential mediator of heart dysfunction and cell death following myocardial ischemia/reperfusion injury.](#)

Zhang Y, Liu X, She ZG, Jiang DS, Wan N, Xia H, Zhu XH, Wei X, Zhang XD, Li H.

Basic Research in Cardiology 2014 Aug; 109(5):434.

Application: Func, Rat, Cardiomyocyte

- [Interferon Regulatory Factor 9 is a Key Mediator of Hepatic Ischemia/Reperfusion Injury.](#)

Wang PX, Zhang R, Huang L, Zhu LH, Jiang DS, Chen HZ, Zhang Y, Tian S, Zhang XF, Zhang XD, Liu DP, Li H.

Journal of Hepatology 2015 Jan; 62(1):111.

Application: Func, Mouse, Hepatocytes, nonparenchymal cells

- [Sirt3 activation attenuated oxidized low-density lipoprotein-induced human umbilical vein endothelial cells' apoptosis by sustaining autophagy.](#)

Luo X, Yang Z, Zheng S, Cao Y, Wu Y.

Cell Biology International 2017 Aug; 41(8):932.

Application: Func, Human, HUVECs