

JC-1 Mitochondrial Membrane Potential Assay Kit

Catalog # KA1324 Size 1 Kit

Specification

Product Description	JC-1 Mitochondrial Membrane Potential Assay Kit is a fluorescence-based method for tracing the behavior of mitochondria.
Regulation Status	For research use only (RUO)
Storage Instruction	Store the kit at -20°C temporarily. For best results, store the components as described in the protocol.

Applications

- Functional Study

Publication Reference

- [Anti-Leukemic Effects of Idesia polycarpa Maxim Branch on Human B-Cell Acute Lymphoblastic Leukemia Cells.](#)

Chan-Seong Kwon, Ji-Eun Lee, Byeol-Eun Jeon, Ye-Rin Woo, Yun-Seo Kim, Jae-Woo Kim, Chae-Jin Park, Seo-Yun Jang, Sang-Woo Kim.

Current Issues in Molecular Biology 2023 May; 45(5):4035.

Application: cell staining, Human, CCRF-SB cells

- [Capsaicin toxicity to the yeast Saccharomyces cerevisiae is not due to oxidative stress but to disruption of membrane structure.](#)

Klaudia Kuczera, Katarzyna Naparło, Mirosław Soszyński, Grzegorz Bartosz, Izabela Sadowska-Bartosz.

Chemico-Biological Interactions 2023 Apr; 374:110407.

Application: Func, Yeast, Yeast Cells

- [Identification of apoptotic pathways in zearalenone-treated mouse sertoli cells.](#)

Hu-He Chao, Lei Wang, Hao-Hai Ma, Ai-Hong Zhao, Hong-Wei Xiao, Xi-Feng Zhang

The Journal of Toxicological Sciences 2022 Jun; 47(6):257.

Application: Quant, Mouse, Sertoli cell

- [Manganese\(II\) tricarbonyl complexes as potential anticancer agents.](#)

Oscar A Lenis-Rojas, Beatriz Carvalho, Rui Cabral, Margarida Silva, Sofia Friães, Catarina Roma-Rodrigues, Marta S H Meireles, Clara S B Gomes, Jhonathan A A Fernández, Sabela F Vila, Juan A Rubiolo, Laura Sanchez, Pedro V Baptista, Alexandra R Fernandes, Beatriz Royo.

Journal of Biological Inorganic Chemistry 2022 Feb; 27(1):49.

Application: Flow Cyt, Human, A2780 cells

- [Vitrification of camel skin tissue for use as a resource for somatic cell nuclear transfer in Camelus dromedarius.](#)

Young-Bum Son, Yeon Ik Jeong, Yeon Woo Jeong, Xianfeng Yu, Lian Cai, Eun Ji Choi, Mohammad Shamim Hossein, Alex Tinson, Kuhad Kuldip Singh, Singh Rajesh, Al Shamsi Noura, Woo Suk Hwang.

In Vitro Cellular & Developmental Biology. Animal 2021 May; 57(5):487.

Application: IF, Human, Human ear skin fibroblasts

- [Triazole-Based Half-Sandwich Ruthenium\(II\) Compounds: From In Vitro Antiproliferative Potential to In Vivo Toxicity Evaluation.](#)

Oscar A Lenis-Rojas, Rui Cabral, Beatriz Carvalho, Sofia Friães, Catarina Roma-Rodrigues, Jhonathan A A Fernández, Sabela F Vila, Laura Sanchez, Clara S B Gomes, Alexandra R Fernandes, Beatriz Royo.

Inorganic Chemistry 2021 Jun; 60(11):8011.

Application: Flow Cyt, Human, A2780 cells

- [In Vitro and In Vivo Effect of Palladacycles: Targeting A2780 Ovarian Carcinoma Cells and Modulation of Angiogenesis.](#)

Francisco Reigosa-Chamorro, Luís R Raposo, Paula Munín-Cruz, M Teresa Pereira, Catarina Roma-Rodrigues, Pedro V Baptista, Alexandra R Fernandes, José M Vila.

Inorganic Chemistry 2021 Mar; 60(6):3939.

Application: Flow Cyt, Func, Human, A2780 cells

- [Delphinidin Increases the Sensitivity of Ovarian Cancer Cell Lines to 3-Bromopyruvate.](#)

Natalia Pieńkowska, Grzegorz Bartosz, Paulina Furdak, Izabela Sadowska-Bartosz.

International Journal of Molecular Sciences 2021 Jan; 22(2):709.

Application: Func, Human, PEO1, SK-OV-3 cells

- [Doxorubicin hydrochloride loaded nanotextured films as a novel drug delivery platform for ovarian cancer treatment.](#)

Gökçen Yaşayan, Pınar Mega Tiber, Oya Orun, Emine Alarçın.

Pharmaceutical Development and Technology 2020 Dec; 25(10):1289.

Application: Func, Human, OVCAR-3 cells

- [Suppressing Growth, Migration, and Invasion of Human Hepatocellular HepG2 Cells by Catharanthus Roseus-silver Nanoparticles.](#)

Nur Asna Binti Azhar, Siti Zulaikha Ghazali, Siti Aishah Abu Bakar, Vuanghao Lim, Nor Hazwani Ahmad.

Toxicology in Vitro 2020 Sep; 67:104910.

Application: Func, Human, HepG2 cells

- [Nitroxide Radical-Containing Redox Nanoparticles Protect Neuroblastoma SH-SY5Y Cells against 6-Hydroxydopamine Toxicity.](#)

Monika Pichla, Łukasz Pulaski, Katarzyna Dominika Kania, Ireneusz Stefaniuk, Bogumił Cieniek, Natalia Pierkowska, Grzegorz Bartosz, Izabela Sadowska-Bartos.

Oxidative Medicine and Cellular Longevity 2020 Apr; 2020:9260748.

Application: Func, Human, SH-SY5Y cells

- [Mitochondria damaged by Oxygen Glucose Deprivation can be Restored through Activation of the PI3K/Akt Pathway and Inhibition of Calcium Influx by Amlodipine Camsylate.](#)

Park HH, Han MH, Choi H, Lee YJ, Kim JM, Cheong JH, Ryu JI, Lee KY, Koh SH.

Scientific Reports 2019 Oct; 9(1):15717.

Application: Func, Rat, Neural stem cells

- [Ginsenoside Rb3 regulates energy metabolism and apoptosis in cardiomyocytes via activating PPAR \$\alpha\$ pathway.](#)

Chen X, Wang Q, Shao M, Ma L, Guo D, Wu Y, Gao P, Wang X, Li W, Li C, Wang Y.

Biomedicine & Pharmacotherapy 2019 Sep; 120:109487.

Application: Func, Rat, H9C2 cells

- [Structural characterization and biological properties of silver\(I\) tris\(pyrazolyl\)methane sulfonate.](#)

Almeida J, Roma-Rodrigues C, Mahmoud AG, Guedes da Silva MFC, Pombeiro AJL, Martins LMDRS, Baptista PV, Fernandes AR.

Journal of Inorganic Biochemistry 2019 Oct; 199:110789.

Application: Func, Human, A2780 cells

- [Molecular Mechanism for Selective Cytotoxicity towards Cancer Cells of Diselenide-Containing Paclitaxel Nanoparticles.](#)

Li J, Gu Y, Zhang W, Bao CY, Li CR, Zhang JY, Liu T, Li S, Huang JX, Xie ZG, Hua SC, Wan Y.

International Journal of Biological Sciences 2019 Jul; 15(8):1755.

Application: Func, Human, HeLa, L292 cells

- [Biological effects of whole Z.Officinale extract on chronic myeloid leukemia cell line K562.](#)

Tiber PM, Sevinc SK, Kilinc O, Orun O.

Gene 2019 Apr; 692:217.

Application: Func, Human, K-562 cells

- [Celastrol attenuates mitochondrial dysfunction and inflammation in palmitate-mediated insulin resistance in C3A hepatocytes.](#)

Abu Bakar MH, Sarmidi MR, Tan JS, Mohamad Rosdi MN.

European Journal of Pharmacology 2017 Mar; 799:73.

Application: Quant, Human, C3A human hepatocytes

- [Oxidative status predicts quality in human mesenchymal stem cells.](#)

Bertolo A, Capossela S, Fränkl G, Baur M, Pötzel T, Stoyanov J.

Stem Cell Research & Therapy 2017 Jan; 8(1):3.

Application: Func, Human, Human bone marrow-derived mesenchymal stem cells

- [Amelioration of Mitochondrial Dysfunction-Induced Insulin Resistance in Differentiated 3T3-L1 Adipocytes via Inhibition of NF-κB Pathways.](#)

Bakar MH, Sarmidi MR, Kai CK, Huri HZ, Yaakob H.

International Journal of Molecular Sciences 2014 Dec; 15(12):22227.

Application: ELISA, Mouse, 3T3-L1 adipocytes

- [Inducing apoptosis effect of caffeic acid 3,4-dihydroxy-phenethyl ester on the breast cancer cells.](#)

Jia J, Yang M, Chen Y, Yuan H, Li J, Cui X, Liu Z.

Tumour Biology 2014 Dec; 35(12):1178.

Application: Func, Human, MDA-MB-231, MDA-MB-435 cells

- [Palmitate Induces TRB3 Expression and Promotes Apoptosis in Human Liver Cells.](#)

Yan W, Wang Y, Xiao Y, Wen J, Wu J, Du L, Cai W.

Cellular Physiology and Biochemistry 2014 Mar; 33(3):823.

Application: Func, Human, L02 cells

- [The novel vaccine peptide GV1001 effectively blocks \$\beta\$ -amyloid toxicity by mimicking the extra-telomeric functions of human telomerase reverse transcriptase.](#)

Park HH, Lee KY, Kim S, Lee JW, Choi NY, Lee EH, Lee YJ, Lee SH, Koh SH.

Neurobiology of Aging 2014 Jun; 35(6):1255.

Application: Func, Human, Neural stem cells

- [Gliotoxin Isolated from Marine Fungus Aspergillus sp. Induces Apoptosis of Human Cervical Cancer and Chondrosarcoma Cells.](#)

Nguyen VT, Lee JS, Qian ZJ, Li YX, Kim KN, Heo SJ, Jeon YJ, Park WS, Choi IW, Je JY, Jung WK.

Marine Drugs 2013 Dec; 12(1):69.

Application: Func, Human, Hela, SW1353 cells