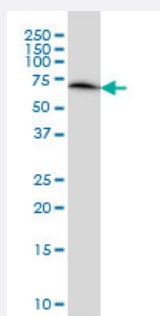


ERO1L monoclonal antibody (M01), clone 4G3

Catalog # H00030001-M01

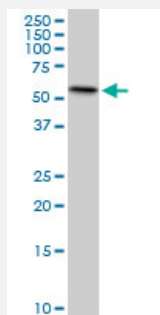
Size 100 ug

Applications



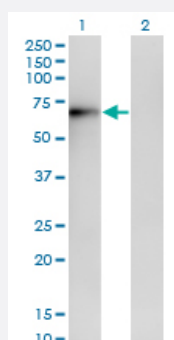
Western Blot (Cell lysate)

ERO1L monoclonal antibody (M01), clone 4G3 Western Blot analysis of ERO1L expression in HeLa (Cat # L013V1).



Western Blot (Cell lysate)

ERO1L monoclonal antibody (M01), clone 4G3. Western Blot analysis of ERO1L expression in PC-12 (Cat # L012V1).

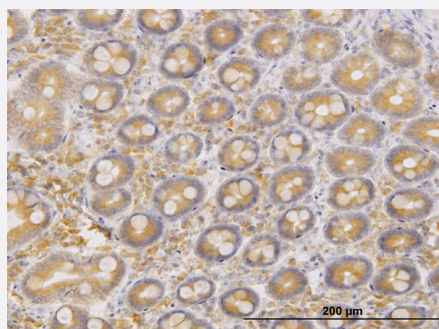


Western Blot (Transfected lysate)

Western Blot analysis of ERO1L expression in transfected 293T cell line by ERO1L monoclonal antibody (M01), clone 4G3.

Lane 1: ERO1L transfected lysate(54 KDa).

Lane 2: Non-transfected lysate.

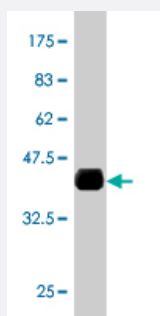
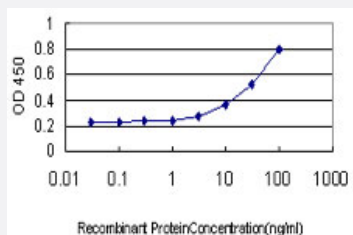


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to ERO1L on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 1.5 ug/ml]

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ERO1L is approximately 3ng/ml as a capture antibody.



Western Blot detection against Immunogen (35.53 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant ERO1L.
Immunogen	ERO1L (NP_055399, 90 a.a. ~ 178 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	DISQCGRRDCAVKPCQSDEVPDGIKSASYKYSEEANNLIEECEQAERLGAVDESLSEETQKAVL QWTKHDDSSDNFCEADDIQSPEAEY
Host	Mouse
Reactivity	Human, Rat
Interspecies Antigen Sequence	Mouse (92); Rat (91)
Isotype	IgG2b Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.53 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

ERO1L monoclonal antibody (M01), clone 4G3 Western Blot analysis of ERO1L expression in HeLa (Cat # L013V1).

[Protocol Download](#)

- Western Blot (Cell lysate)

ERO1L monoclonal antibody (M01), clone 4G3. Western Blot analysis of ERO1L expression in PC-12 (Cat # L012V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of ERO1L expression in transfected 293T cell line by ERO1L monoclonal antibody (M01), clone 4G3.

Lane 1: ERO1L transfected lysate(54 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to ERO1L on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 1.5 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ERO1L is approximately 3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — ERO1L

Entrez GeneID

[30001](#)

GeneBank Accession#

[NM_014584](#)

Protein Accession#	NP_055399
Gene Name	ERO1L
Gene Alias	ERO1-alpha
Gene Description	ERO1-like (S. cerevisiae)
Gene Ontology	Hyperlink
Other Designations	ERO1-like

Publication Reference

- [ERO1 \$\alpha\$ promotes the proliferation and inhibits apoptosis of colorectal cancer cells by regulating the PI3K/AKT pathway.](#)

Min Wu, Ruixue Li, Jianyan Qin, Ziyuan Wang, Jiasen Guo, Fenghong Lv, Guoqin Wang, Youguang Huang.

Journal of Molecular Histology 2023 Dec; 54(6):621.

Application: IHC, WB, Human, Mouse, HCT116, HT29, SW480, SW620, RKO cells, Human CRC tissue, Mouse xenograft tumor tissue

- [Silica nanoparticles induce ovarian granulosa cell apoptosis via activation of the PERK-ATF4-CHOP-ERO1 \$\alpha\$ pathway-mediated IP3R1-dependent calcium mobilization.](#)

Fenglei Chen, Jiarong Sun, Yujing Wang, Jason William Grunberger, Zhen Zheng, Nitish Khurana, Xianyu Xu, Xin Zhou, Hamidreza Ghandehari, Jinlong Zhang.

Cell Biology and Toxicology 2022 Nov; [Epub].

Application: WB-Ce, WB-Tr, Mouse, Mouse granulosa cells

- [The NFIB-ERO1A axis promotes breast cancer metastatic colonization of disseminated tumour cells.](#)

Federica Zilli, Pedro Marques Ramos, Priska Auf der Maur, Charly Jehanno, Atul Sethi, Marie-May Coissieux, Tobias Eichlisberger, Loïc Sauter, Adelin Rouchon, Laura Bonapace, Joana Pinto Couto, Roland Rad, Michael Rugaard Jensen, Andrea Banfi, Michael B Stadler, Mohamed Bentires-Alj.

EMBO Molecular Medicine 2021 Apr; 13(4):e13162.

Application: WB-Tr, Mouse, Tumours derived from mouse mammary fat pad

- [ERO1 \$\alpha\$ inhibits cell apoptosis and regulates steroidogenesis in mouse granulosa cells.](#)

Hu J, Jin J, Qu Y, Liu W, Ma Z, Zhang J, Chen F.

Molecular and Cellular Endocrinology 2020 Jul; 511:110842.

Application: IF, IHC, WB-Ti, WB-Tr, Mouse, Ovary, Uterus, Jejunum, Liver, Lung, Kidney, Heart, Thymus, Granulosa cells

- [ERO1 \$\alpha\$ promotes testosterone secretion in hCG-stimulated mouse Leydig cells via activation of the PI3K/AKT/mTOR signaling pathway.](#)

Chen F, Wang Y, Liu Q, Hu J, Jin J, Ma Z, Zhang J.

Journal of Cellular Physiology 2020 Jul; 235(7-8):5666.

Application: IF, IHC, WB-Ce, WB-Ti, WB-Tr, Mouse, rimary Leydig cells, Hearts, Kidneys, Livers, Lungs, Spleens, Testes

- [ERO1 \$\alpha\$ is a novel endogenous marker of hypoxia in human cancer cell lines.](#)

Takei N, Yoneda A, Kosaka M, Sakai-Sawada K, Tamura Y.

BMC Cancer 2019 May; 19(1):510.

Application: IF, IHC-P, WB-Ce, Human, HCT-116, HeLa cells

- [Combined expression of protein disulfide isomerase and endoplasmic reticulum oxidoreductin 1- \$\alpha\$ is a poor prognostic marker for non-small cell lung cancer.](#)

Kim KM, An AR, Park HS, Jang KY, Moon WS, Kang MJ, Lee YC, Ku JH, Chung MJ.

Oncology Letters 2018 Nov; 16(5):5753.

Application: IHC-P, Human, Human non-small cell lung cancer

- [Alleviation of Hippocampal Endoplasmic Reticulum Stress by Allomyrina dichotoma Larvae Extract.](#)

Kim J, Haque MN, Goo TW, Moon IS.

The American Journal of Chinese Medicine 2018 Mar; 46(3):633.

Application: WB, Mouse, Hippocampi

- [Central Administration of 1-Deoxynojirimycin Attenuates Hypothalamic Endoplasmic Reticulum Stress and Regulates Food Intake and Body Weight in Mice with High-Fat Diet-Induced Obesity.](#)

Kim J, Yun EY, Quan FS, Park SW, Goo TW.

Evidence-Based Complementary and Alternative Medicine : ECAM. 2017 Jul; 2017:3607089.

Application: WB-Ti, Mouse, Mouse hypothalamus

- [Identification and characterization of potential biomarkers by quantitative tissue proteomics of primary lung adenocarcinoma.](#)

Hsu CH, Hsu CW, Hsueh C, Wang CL, Wu YC, Wu CC, Liu CC, Yu JS, Chang YS, Yu CJ.

Molecular & Cellular Proteomics 2016 Jul; 15(7):2396.

Application: IHC, WB-Ce, WB-Ti, Human, Lung, A549 cells

- [Cancer-associated oxidoreductase ERO1- \$\alpha\$ drives the production of VEGF via oxidative protein folding and regulating the mRNA level.](#)

Tanaka T, Kutomi G, Kajiwara T, Kukita K, Kochin V, Kanaseki T, Tsukahara T, Hirohashi Y, Torigoe T, Okamoto Y, Hirata K, Sato N, Tamura Y.

British Journal of Cancer 2016 May; 114(11):1227.

Application: IHC-P, WB-Ce, Human, Mouse, 4T1 cells, Breast

- [Allomyrina Dichotoma Larvae Regulate Food Intake and Body Weight in High Fat Diet-Induced Obese Mice Through mTOR and Mapk Signaling Pathways.](#)

Kim J, Yun EY, Park SW, Goo TW, Seo M.

Nutrients 2016 Feb; 8(2):100.

Application: WB-Ce, Mouse, Hypothalamus

- [Ero1- \$\alpha\$ and PDIs constitute a hierarchical electron transfer network of endoplasmic reticulum oxidoreductases.](#)

Araki K, Iemura S, Kamiya Y, Ron D, Kato K, Natsume T, Nagata K.

The Journal of Cell Biology 2013 Sep; 202(6):861.

Application: WB-Tr, Human, HEK 293T, HeLa cells

Pathway

- [Vibrio cholerae infection](#)

Disease

- [Tobacco Use Disorder](#)