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ERO1-like (aa105-118) Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3527a

Specification

ERO1-like (aa105-118) Antibody (internal region) - Product Information

Application	**WB, IHC, Pep-ELISA**
Primary Accession	Q96HE7
Other Accession	NP_055399.1, 30001
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**54393**

ERO1-like (aa105-118) Antibody (internal region) - Additional Information

Gene ID 30001

Other Names
ERO1-like protein alpha, ERO1-L, ERO1-L-alpha, 1.8.4.-, Endoplasmic oxidoreductin-1-like protein, Oxidoreductin-1-L-alpha, ERO1L

Dilution
WB~~1:1000
IHC~~1:100~500
Pep-ELISA~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ERO1-like (aa105-118) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ERO1-like (aa105-118) Antibody (internal region) - Protein Information

Name ERO1A (HGNC:13280)

Synonyms ERO1L

Function
Oxidoreductase involved in disulfide bond formation in the endoplasmic reticulum. Efficiently reoxidizes P4HB/PDI, the enzyme catalyzing protein disulfide formation, in order to allow P4HB to sustain additional rounds of disulfide formation. Following P4HB reoxidation, passes its electrons to molecular oxygen via FAD, leading to the production of reactive oxygen species (ROS) in the cell. Required for the proper folding of immunoglobulins (PubMed:29858230). Plays an important role in ER stress-induced, CHOP-dependent apoptosis by activating the inositol 1,4,5-trisphosphate receptor IP3R1. Involved in the release of the unfolded cholera toxin from reduced P4HB/PDI in case of infection by V.cholerae, thereby playing a role in retrotranslocation of the toxin.

Cellular Location
Endoplasmic reticulum membrane; Peripheral membrane protein; Lumenal side. Golgi apparatus lumen. Secreted. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8R4A1}. Note=The association with ERP44 is essential for its retention in the endoplasmic reticulum (PubMed:29858230). In neurons, it localizes to dendrites (By similarity). {ECO:0000250|UniProtKB:Q8R4A1, ECO:0000269|PubMed:29858230}

Tissue Location
Widely expressed at low level. Expressed at high level in upper digestive tract. Highly expressed in esophagus. Weakly expressed in stomach and duodenum.

ERO1-like (aa105-118) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ERO1-like (aa105-118) Antibody (internal region) - Images

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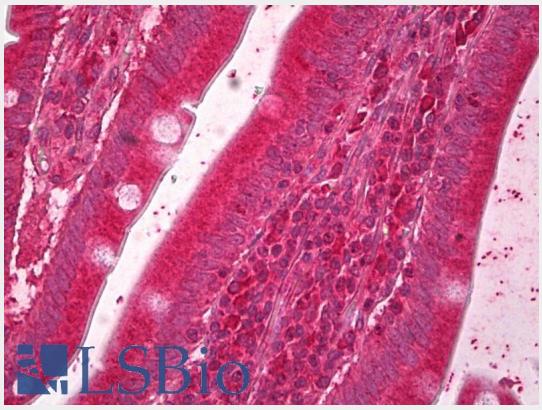
AF3527a (0.3 µg/ml) staining of A431 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

EB10882 (0.3µg/ml) staining of A431 lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB10882 (5µg/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

ERO1-like (aa105-118) Antibody (internal region) - References

Crystal structures of human Ero1? reveal the mechanisms of regulated and targeted oxidation of PDI. Inaba K, Masui S, Iida H, Vavassori S, Sitia R, Suzuki M. EMBO J. 2010 Oct 6;29(19):3330-43. PMID: 20834232