

ERO1L Polyclonal antibody

Catalog Number: 18313-1-AP

Basic Information

Catalog Number:

18313-1-AP

Size:

270 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC008674

GeneID (NCBI):

30001

UNIPROT ID:

Q96HE7

Full Name:

ERO1-like (S. cerevisiae)

Calculated MW:

54 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IHC 1:20-1:200

Applications

Tested Applications:

IHC, ELISA

Species Specificity:

human, mouse

Positive Controls:

IHC : human pancreas tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

ERO1L, also named as ERO1-alpha, is an essential oxidoreductase that oxidizes proteins in the endoplasmic reticulum to produce disulfide bonds. It acts by oxidizing directly P4HB/PDI isomerase through a direct disulfide exchange. It does not act as a direct oxidant of folding substrate, but relies on P4HB/PDI to transfer oxidizing equivalent. Associates with ERP44 but not with GRP54, demonstrating that it does not oxidize all PDI related proteins and can discriminate between PDI and related proteins. Its reoxidation probably involves electron transfer to molecular oxygen via FAD. Glutathione may be required to regulate its activity in the endoplasmic reticulum. It may be responsible for a significant proportion of reactive oxygen species (ROS) in the cell, thereby being a source of oxidative stress. It is required for the folding of immunoglobulin proteins. Responsible for 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. This antibody has no cross reaction to ERO1L.

Storage

Storage:

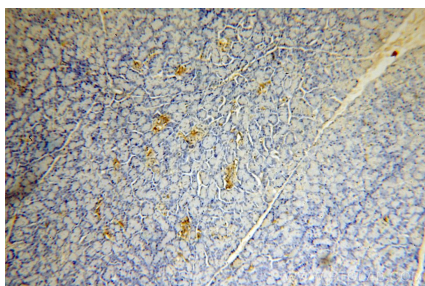
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

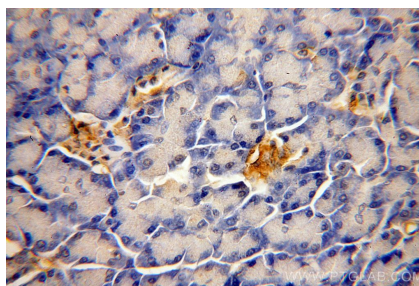
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human pancreas using 18313-1-AP (ERO1L antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human pancreas using 18313-1-AP (ERO1L antibody) at dilution of 1:50 (under 40x lens).