For Research Use Only

# ERO1L Monoclonal antibody, PBS Only (Capture)

Catalog Number:67416-1-PBS Featured Product

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## Basic Information

Catalog Number:
67416-1-PBS

Size:
100ug , Concentration: 1mg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG2b

Immunogen Catalog Number:
AG29910

GenBank Accession Number:
BC008674

GeneID (NCBI):
30001

UNIPROT ID:
Q96HE7

Full Name:
ERO1-like (S. cerevisiae)

Calculated MW:
468 aa, 54 kDa

Observed MW:
54 kDa

Purification Method:
Protein A purification

CloneNo.:
1G12E11

## Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, Indirect ELISA

Species Specificity:
Human, Mouse, Rat

## Background Information

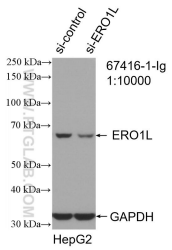
ERO1L, also named as ERO1-alpha, is an essential oxidoreductase that oxidizes proteins in the endoplasmic reticulum to produce disulfide bonds. It acts by oxidizing directly P4HB/PDI isomerase through a direct disulfide exchange. It does not act as a direct oxidant of folding substrate, but relies on 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. ERO1L has a calculated molecular weight of 54 kDa and can be detected as 60kDa.

## Storage

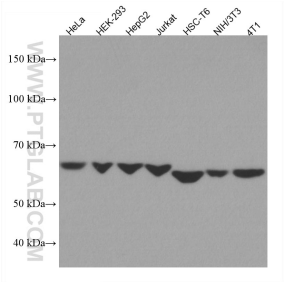
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

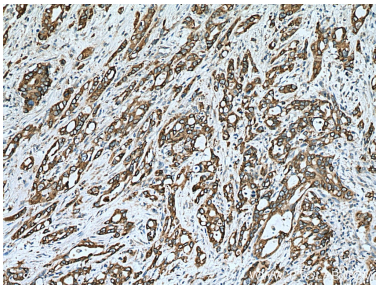
## Selected Validation Data



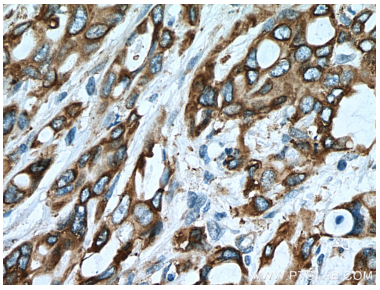

WB result of ERO1L antibody (67416-1-Ig; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ERO1L transfected HepG2 cells. This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.



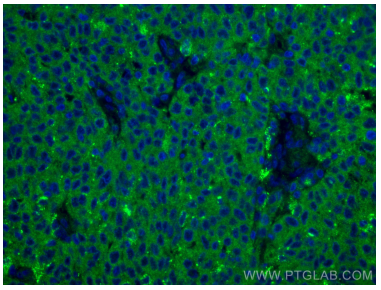

Various lysates were subjected to SDS PAGE followed by western blot with 67416-1-Ig (ERO1L antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.



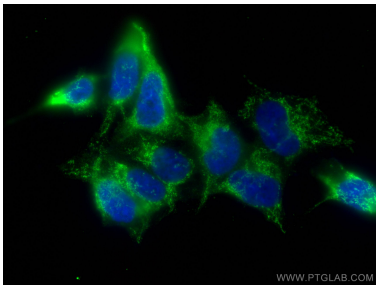
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 67416-1-Ig (ERO1L antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 67416-1-Ig (ERO1L antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.




Immunofluorescent analysis of (4% PFA) fixed human stomach cancer tissue using ERO1L antibody (67416-1-Ig, Clone: 1G12E11 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.




Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using ERO1L antibody (67416-1-Ig, Clone: 1G12E11 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67416-1-PBS in a different storage buffer formulation.