For Research Use Only

CoraLite® Plus 488-conjugated ERO1L Monoclonal antibody



Purification Method:

CloneNo.:

1G12E11

IF-P 1:200-1:800

wavelengths: 493 nm / 522 nm

Protein A purification

Recommended Dilutions:

Excitation/Emission maxima

Catalog Number: CL488-67416

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL488-67416 BC008674 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 30001 Nanodrop: **UNIPROT ID:**

Q96HE7 Mouse Full Name:

Isotype: ERO 1-like (S. cerevisiae)

IgG2b Calculated MW: Immunogen Catalog Number: 468 aa, 54 kDa AG29910

Observed MW: 54 kDa

Positive Controls:

IF-P: human stomach cancer tissue,

Applications

Tested Applications:

IF-P

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.

Storage

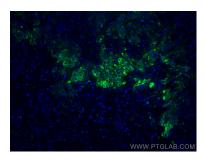
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

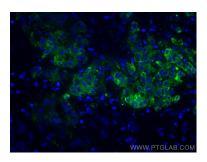
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human stomach cancer tissue using CoraLite® Plus 488 ERO 1L antibody (CL488-67416, Clone: 1G12E11) at dilution of 1:200.



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