

CoraLite®594-conjugated ERO1L Monoclonal antibody

Catalog Number: **CL594-67416**

Basic Information

Catalog Number: CL594-67416	GenBank Accession Number: BC008674	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 30001	CloneNo.: 1G12E11
Source: Mouse	UNIPROT ID: Q96HE7	Recommended Dilutions: IF-P 1:50-1:500
Isotype: IgG2b	Full Name: ERO1-like (S. cerevisiae)	Excitation/Emission maxima wavelengths: 588 nm / 604 nm
Immunogen Catalog Number: AG29910	Calculated MW: 468 aa, 54 kDa	
	Observed MW: 54 kDa	

Applications

Tested Applications: IF-P	Positive Controls: IF-P : human stomach cancer tissue,
Species Specificity: Human, Mouse, Rat	

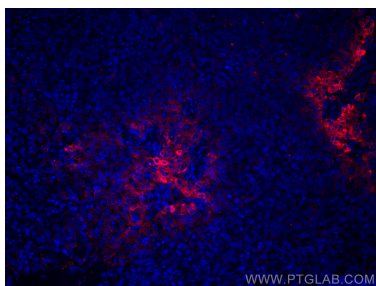
Background Information

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.

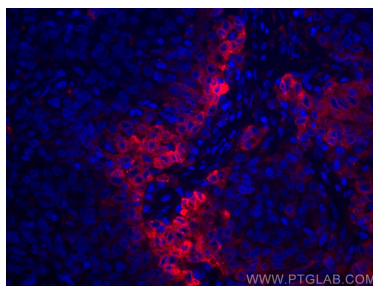
Storage

Storage:
Store at -20°C. Avoid exposure to light.
Storage Buffer:
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®594 ERO1L antibody (CL594-67416, Clone: 1G12E11) at dilution of 1:200.



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