

# CoraLite® Plus 488-conjugated ERO1L Monoclonal antibody

Catalog Number: **CL488-67416**

## Basic Information

<b>Catalog Number:</b> CL488-67416	<b>GenBank Accession Number:</b> BC008674	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 30001	<b>CloneNo.:</b> 1G12E11
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q96HE7	<b>Recommended Dilutions:</b> IF-P 1:200-1:800
<b>Isotype:</b> IgG2b	<b>Full Name:</b> ERO1-like (S. cerevisiae)	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG29910	<b>Calculated MW:</b> 468 aa, 54 kDa	
	<b>Observed MW:</b> 54 kDa	

## Applications

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

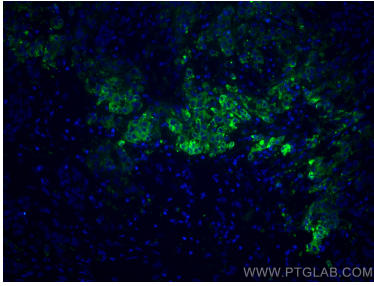
## Background Information

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.

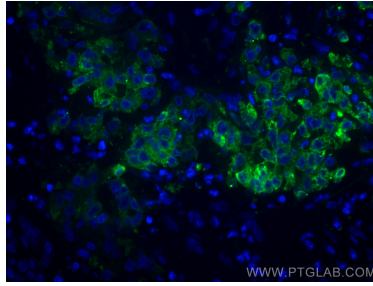
## Storage

**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® Plus 488 ERO1L antibody (CL488-67416, Clone: 1G12E11) at dilution of 1:200.



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