

ERO1L Polyclonal Antibody

Catalog number: 12007-1-AP

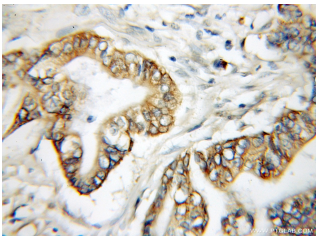
Size: 63 µg/150 µl

Source: Rabbit

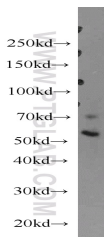
Isotype: IgG

Synonyms:

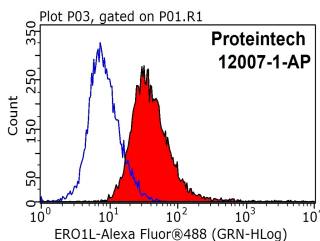
ERO1L; ERO1 alpha, ERO1 L, ERO1 L alpha, ERO1 like (S. cerevisiae), ERO1 like protein alpha, ERO1L, Oxidoreductin 1 L alpha



Immunohistochemical of paraffin-embedded human pancreas cancer using 12007-1-AP (ERO1L antibody) at dilution of 1:50 (under 10x lens)



mouse ovary tissue were subjected to SDS PAGE followed by western blot with 12007-1-AP (ERO1L antibody) at dilution of 1:100



1X10⁶ HeLa cells were stained with 0.2µg ERO1L antibody (12007-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.

Background

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.

Applications

Tested applications:	ELISA, IHC, WB, FC, IP
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Mouse
Calculated ERO1L MW:	468aa, 54 kDa
Observed ERO1L MW:	54 kDa
Positive WB detected in	Mouse ovary tissue, A431 cells
Positive IP detected in	L02 cells
Positive IHC detected in	Human pancreas cancer tissue
Positive FC detected in	HeLa cells
Recommended dilution:	WB: 1:200-1:1000
	IP: 1:200-1:1000
	IHC: 1:20-1:200
	FC: N/A

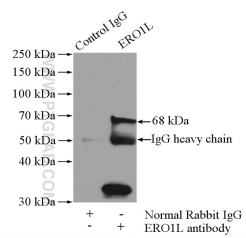
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag2620
GenBank accession number:	BC008674
Gene ID (NCBI):	30001
Full name:	ERO1-like (S. cerevisiae)

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



IP Result of anti-ERO1L
(IP:12007-1-AP, 4ug;
Detection:12007-1-AP 1:300)
with L02 cells lysate 1400ug.