

Rabbit Anti-PDIA2 antibody

SL21441R

Product Name:	PDIA2
Chinese Name:	蛋白质二硫键异构酶抗体
Alias:	P4HB; Pancreas specific protein disulfide isomerase; Pancreas-specific protein disulfide isomerase; Pancreatic protein disulfide isomerase; PDA2; PDI; PDIA2; PDIA2_HUMAN; PDIP; PDIR; Protein disulfide isomerase A2; Protein disulfide isomerase; Protein disulfide isomerase associated 2; Protein disulfide isomerase family A member 2; Protein disulfide isomerase pancreatic; Protein disulfide-isomerase A2; Rho GDP dissociation inhibitor gamma.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDIA2:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The three dimensional structure of many extracellular proteins is stabilized by the formation of disulphide bonds. Studies suggest that a microsomal enzyme known as

Protein Disulphide Isomerase (PDI) is involved in disulphide-bond formation and isomerization, as well as the reduction of disulphide bonds in proteins. PDI, which catalyses disulphide interchange between thiols and protein dilsulphides, has also been referred to as thiol:protein-disulphide oxidoreductase and as glutathione:insulin transhydrogenase because of its role in reduction of disulphide bonds. The highly conserved sequence Lys-Asp-Glu-Leu (KDEL) is present at the carboxy-terminus of PDI and other soluble endoplasmic reticulum (ER) resident proteins including the 78 and 94 kDa glucose regulated proteins (GRP78 and GRP94 respectively). The presence of carboxy-terminal KDEL appears to be necessary for ER retention and appears to be sufficient to reduce the secretion of proteins from the ER. This retention is reported to be mediated by a KDEL receptor.

Function:

Acts as an intracellular estrogen-binding protein. May be involved in modulating cellular levels and biological functions of estrogens in the pancreas. May act as a chaperone that inhibits aggregation of misfolded proteins.

Subunit:

Monomer; predominantly as monomer under reducing conditions. Homodimer; disulfide-linked. Part of a large chaperone multiprotein complex comprising DNAJB11, HSP90B1, HSPA5, HYOU, PDIA2, PDIA4, PDIA6, PPIB, SDF2L1, UGT1A1 and very small amounts of ERP29, but not, or at very low levels, CALR nor CANX.

Subcellular Location:

Endoplasmic reticulum lumen.

Tissue Specificity:

Highly expressed in pancreas (at protein level).

Post-translational modifications:

The disulfide-linked homodimer exhibits an enhanced chaperone activity. Glycosylated.

Similarity:

Belongs to the protein disulfide isomerase family.

Contains 2 thioredoxin domains.

SWISS:

Q13087

Gene ID:

64714

Database links:

Entrez Gene: 504356Cow

Entrez Gene: 64714Human

Entrez Gene: 69191 Mouse

Entrez Gene: 287164Rat

Omim: 608012Human

SwissProt: Q13087Human

SwissProt: D3Z6P0Mouse

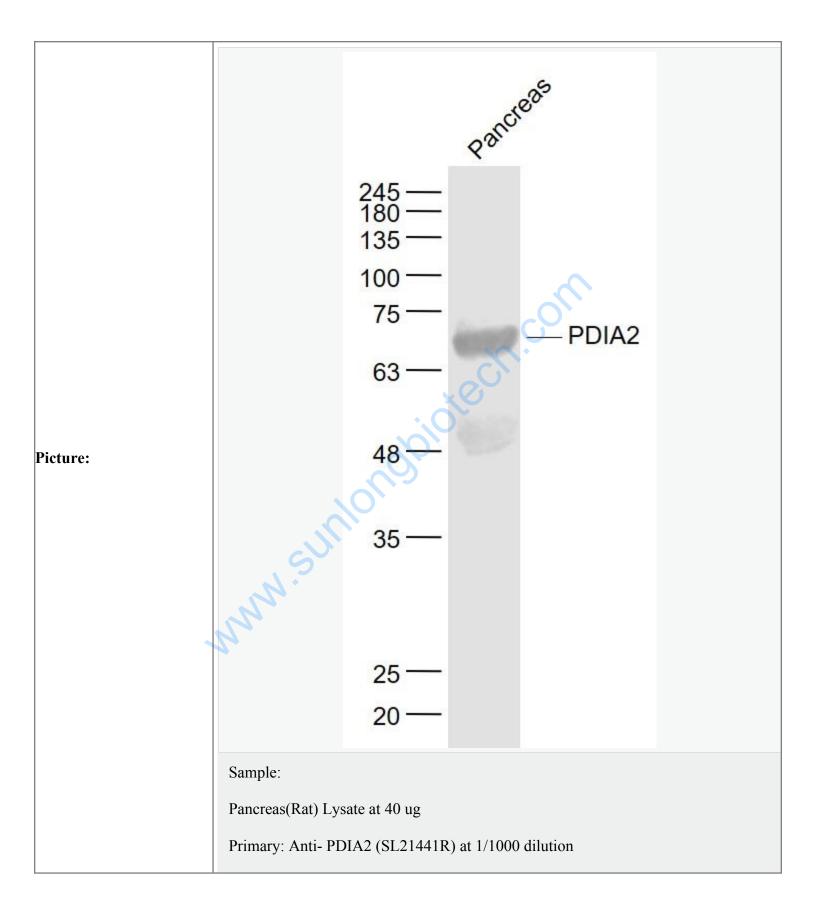
Unigene: 66581Human

Unigene: 32631 Mouse

Unigene: 65154Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 56 kD
Observed band size: 56 kD

