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PDI (Protein Disulfide Isomerase) Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11017

Specification

PDI (Protein Disulfide Isomerase) Antibody - Product Information

Application	**WB**
Primary Accession	P30101
Other Accession	CAA89996
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**56782**

PDI (Protein Disulfide Isomerase) Antibody - Additional Information

Gene ID 2923

Application & Usage	**Western blot analysis (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Recombinant PDI is also available separately.**

Other Names
Protein Disulfide Isomerase

Target/Specificity
PDI

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-PDI polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
PDI (Protein Disulfide Isomerase) Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

PDI (Protein Disulfide Isomerase) Antibody - Protein Information

Name PDIA3 (HGNC:4606)

Synonyms ERP57, ERP60, GRP58

Function
Protein disulfide isomerase that catalyzes the formation, isomerization, and reduction or oxidation of disulfide bonds in client proteins and functions as a protein folding chaperone (PubMed:11825568, PubMed:16193070, PubMed:27897272, PubMed:36104323, PubMed:7487104). Core component of the major histocompatibility complex class I (MHC I) peptide loading complex where it functions as an essential folding chaperone for TAPBP. Through TAPBP, assists the dynamic assembly of the MHC I complex with high affinity antigens in the endoplasmic reticulum. Therefore, plays a crucial role in the presentation of antigens to cytotoxic T cells in adaptive immunity (PubMed:35948544, PubMed:36104323).

Cellular Location
Endoplasmic reticulum. Endoplasmic reticulum lumen {ECO:0000250|UniProtKB:P11598}. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545).

Tissue Location
Detected in the flagellum and head region of spermatozoa (at protein level) (PubMed:20400973). Expressed in liver, stomach and colon (at protein level). Expressed in gastric parietal cells and chief cells (at protein level) (PubMed:24188822)

PDI (Protein Disulfide Isomerase) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PDI (Protein Disulfide Isomerase) Antibody - Images

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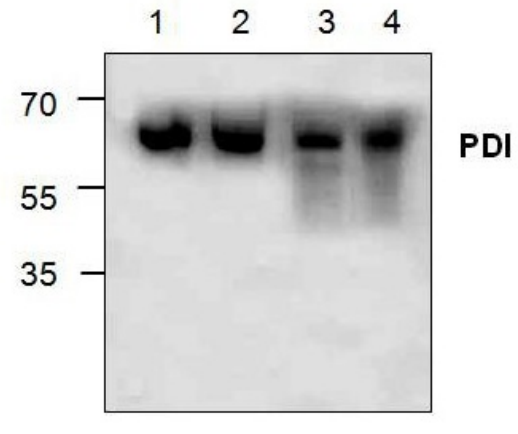

Western blot analysis of PDI in lysate from Jurkat cells (Lane 1 & 2), 3T3 cells (Lane 3) and Rat kidney (Lane 4).

PDI (Protein Disulfide Isomerase) Antibody - Background

Protein disulfide isomerases (PDIs) constitute a family of structurally related enzymes which catalyze disulfide bonds formation, reduction, or isomerization of newly synthesized proteins in the lumen of the endoplasmic reticulum (ER). Human Protein Disulfide Isomerase is involved in disulphide-bond formation and isomerization, as well as the reduction of disulphide bonds in proteins. PDI has been found to have moderate effects (25-fold) on the rate of oxidative folding of proteins in vitro.