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PDIA3 / ERp57 Antibody (clone Map.ERP57)

Mouse Monoclonal Antibody
Catalog # ALS14982

Specification

PDIA3 / ERp57 Antibody (clone Map.ERP57) - Product Information

Application	**WB**
Primary Accession	P30101
Reactivity	**Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Bovine, Guinea Pig, Dog**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**57kDa KDa**

PDIA3 / ERp57 Antibody (clone Map.ERP57) - Additional Information

Gene ID 2923

Other Names
Protein disulfide-isomerase A3, 5.3.4.1, 58 kDa glucose-regulated protein, 58 kDa microsomal protein, p58, Disulfide isomerase ER-60, Endoplasmic reticulum resident protein 57, ER protein 57, ERp57, Endoplasmic reticulum resident protein 60, ER protein 60, ERp60, PDIA3, ERP57, ERP60, GRP58

Target/Specificity
Detects ~57 kD protein.

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
PDIA3 / ERp57 Antibody (clone Map.ERP57) is for research use only and not for use in diagnostic or therapeutic procedures.

PDIA3 / ERp57 Antibody (clone Map.ERP57) - 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:7487104, PubMed:11825568, PubMed:16193070, PubMed:27897272, PubMed:36104323). 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).

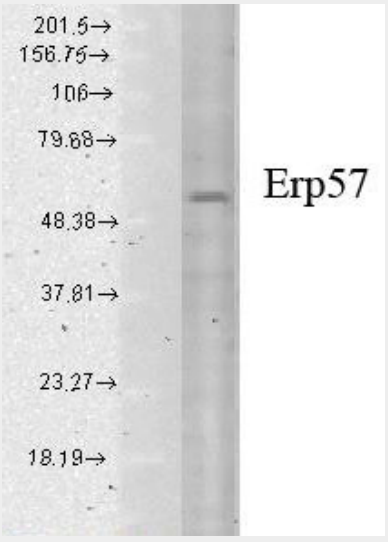
Tissue Location
Detected in the flagellum and head region of spermatozoa (at protein level) (PubMed:20400973). Expressed in liver, stomach and colon (at protein level). Expressed in gastric parietal cells and chief cells (at protein level) (PubMed:24188822)

PDIA3 / ERp57 Antibody (clone Map.ERP57) - 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

PDIA3 / ERp57 Antibody (clone Map.ERP57) - Images



Western blot analysis of ERP57 in human cell lysates using a 1:1000 dilution of PDIA3 / ERp57...

PDIA3 / ERp57 Antibody (clone Map.ERP57) - References

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Charnock-Jones D.S.,et al.Int. J. Biochem. Cell Biol. 28:81-89(1996).
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