Human ERp57/PDIA3 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF8219

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ERp57/PDIA3 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant ERp57/PDIA3 Arg107-Lys366 Accession # P30101
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

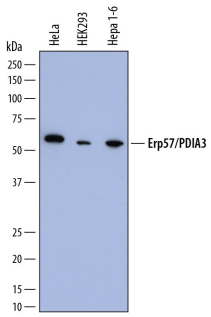
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

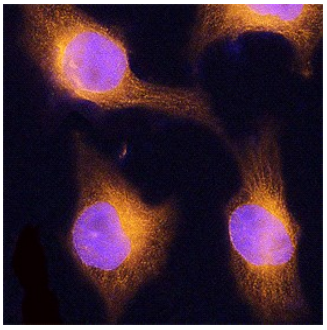
DATA

Western Blot



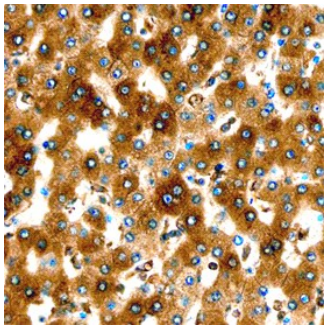
Detection of Human and Mouse ERp57/PDIA3 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, HEK293 human embryonic kidney cell line, and Hepa 1-6 mouse hepatoma cell line. PVDF membrane was probed with 0.2 µg/mL of Sheep Anti-Human ERp57/PDIA3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8219) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ERp57/PDIA3 at approximately 57 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



ERp57/PDIA3 in HeLa Human Cell Line. ERp57/PDIA3 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human ERp57/PDIA3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8219) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunohistochemistry



ERp57/PDIA3 in Human Liver. ERp57/PDIA3 was detected in immersion fixed paraffin-embedded sections of human liver using Sheep Anti-Human ERp57/PDIA3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8219) at 1 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of hepatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

BACKGROUND

ERp57 (Endoplasmic reticulum resident protein 57; also Protein disulfide-isomerase A3/PDIA3) is a 57-60 kDa member of the protein disulfide isomerase family of proteins. Knockdown of ERp57 or antibody-targeted inhibition of the secreted form significantly impaired the secretion and accumulation of extracellular matrix. ERp57 is highly similar to other PDI family members in amino acid sequence and structural/functional domain organization. This protein plays an important role in endoplasmic reticulum quality control of newly synthesized glycoproteins, is critical in major histocompatability complex class I assembly and regulates gene expression. ERp57 has been implicated in human pathologies including cancer and Alzheimer's disease. Within aa 107 - 366, human ERp57 shares 92% aa sequence identity with mouse ERp57.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956