10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-Calnexin Antibody
Peptide-affinity purified goat antibody
Catalog # AF1179a

Specification

Goat Anti-Calnexin Antibody - Product Information

Application	**WB, IHC, IF, Pep-ELISA**
Primary Accession	P27824
Other Accession	NP_001737, 821, 12330 (mouse), 29144 (rat)
Reactivity	**Human, Mouse**
Predicted	**Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**67568**

Goat Anti-Calnexin Antibody - Additional Information

Gene ID 821

Other Names
Calnexin, IP90, Major histocompatibility complex class I antigen-binding protein p88, p90, CANX

Dilution
WB~~1:1000
IHC~~1:100~500
IF~~1:50~200
Pep-ELISA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Calnexin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Calnexin Antibody - Protein Information

Name CANX

Function

Calcium-binding protein that interacts with newly synthesized monoglucosylated glycoproteins in the endoplasmic reticulum. It may act in assisting protein assembly and/or in the retention within the ER of unassembled protein subunits. It seems to play a major role in the quality control apparatus of the ER by the retention of incorrectly folded proteins. Associated with partial T-cell antigen receptor complexes that escape the ER of immature thymocytes, it may function as a signaling complex regulating thymocyte maturation. Additionally it may play a role in receptor-mediated endocytosis at the synapse.

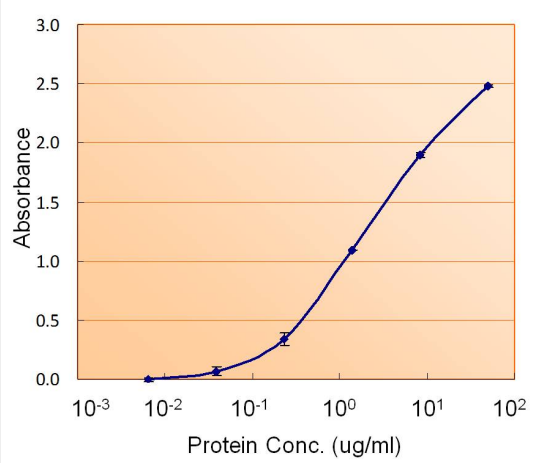
Cellular Location
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:P24643}; Single-pass type I membrane protein. Melanosome membrane; Single-pass type I membrane protein. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545, PubMed:17081065). The palmitoylated form preferentially localizes to the perinuclear rough ER (PubMed:22314232) Localizes to endoplasmic reticulum mitochondria-associated membrane (MAMs) that connect the endoplasmic reticulum and the mitochondria (By similarity). {ECO:0000250|UniProtKB:P24643, ECO:0000269|PubMed:12643545, ECO:0000269|PubMed:17081065, ECO:0000269|PubMed:22314232}

Goat Anti-Calnexin 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

Goat Anti-Calnexin Antibody - Images



AF1179a (1.5ug/ml) as the reporter with EB002024 as the capture rabbit antibody (2.5ug/ml).

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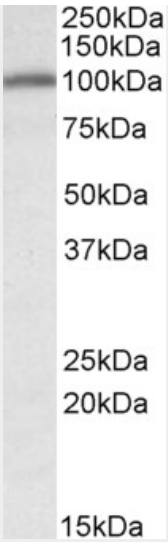
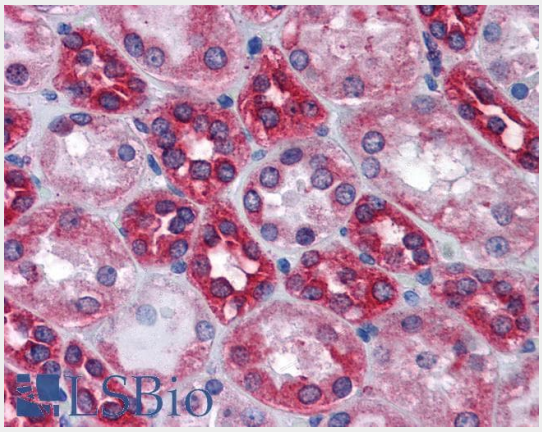
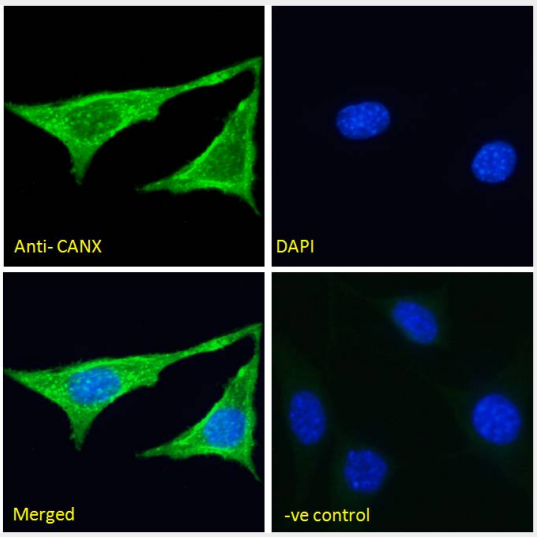


AF1179a (0.3µg/ml) staining of Mouse Heart lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



AF1179a (3.8µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1179a Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic/ER staining. The nuclear stain is DAP

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Goat Anti-Calnexin Antibody - Background

This gene encodes a member of the calnexin family of molecular chaperones. The encoded protein is a calcium-binding, endoplasmic reticulum (ER)-associated protein that interacts transiently with newly synthesized N-linked glycoproteins, facilitating protein folding and assembly. It may also play a central role in the quality control of protein folding by retaining incorrectly folded protein subunits within the ER for degradation. Alternatively spliced transcript variants encoding the same protein have been described.

Goat Anti-Calnexin Antibody - References

Human delta opioid receptor biogenesis is regulated via interactions with SERCA2b and calnexin. Tuusa JT, et al. FEBS J, 2010 Jul. PMID 20528919.
Mapping of domains on HIV envelope protein mediating association with calnexin and protein-disulfide isomerase. Papandr□ou MJ, et al. J Biol Chem, 2010 Apr 30. PMID 20202930.
Calnexin phosphorylation attenuates the release of partially misfolded alpha1-antitrypsin to the secretory pathway. Cameron PH, et al. J Biol Chem, 2009 Dec 11. PMID 19815548.
Calnexin improves the folding efficiency of mutant rhodopsin in the presence of pharmacological chaperone 11-cis-retinal. Noorwez SM, et al. J Biol Chem, 2009 Nov 27. PMID 19801547.
Altered expression of glycoproteins on the cell surface of Jurkat cells during etoposide-induced apoptosis: shedding and intracellular translocation of glycoproteins. Sato H, et al. Biochim Biophys Acta, 2009 Oct. PMID 19524015.