

Calnexin Antibody

Rabbit Polyclonal Antibody Catalog # ABV10625

Specification

Calnexin Antibody - Product Information

Application
Primary Accession
Reactivity

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 67568

Calnexin Antibody - Additional Information

Gene ID 821

Application & Usage

Western blotting (0.5-4 μ g/ml). However, the optimal concentrations should be determined individually. The antibody recognizes ~90-100 kDa band, corresponding to glycosylated Calnexin in samples from human, mouse, rat, and dog origins. Reactivity to other species has not been tested.

Other Names

CNX, ER membrane marker

Target/Specificity

Calnexin

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100~\mu g$ (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

WB

P27824

Human, Mouse, Rat, Dog

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

Calnexin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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}

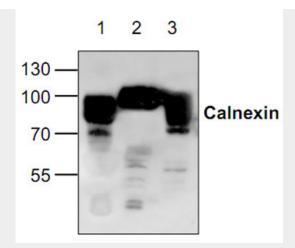
Calnexin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Calnexin Antibody - Images





Western blot analysis of Calnexin expression in lysates from rat kidney (Lane 1), 3T3 cells (Lane 2), and Jurkat cells (Lane 3).

Calnexin Antibody - Background

Calnexin (CNX) is a 90kDa integral protein of the endoplasmic reticulum (ER). Calnexin belongs among chaperones, which are characterized by their main function of assisting protein folding and quality control, ensuring that only properly folded and assembled proteins proceed further along the secretary pathway. The function of Calnexin is to retain unfolded or unassembled N-linked glycoproteins in the endoplasmic reticulum.