10320 Camino Santa Fe, Suite G
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# Calnexin Antibody
**Rabbit Polyclonal Antibody**
**Catalog # ABV10625**

## Specification

### Calnexin Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P27824 |
| Reactivity | **Human, Mouse, Rat, Dog** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **67568** |

### Calnexin Antibody - Additional Information

**Gene ID** 821

| | |
|---|---|
| Application & Usage | **Western blotting (0.5-4 µg/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 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

**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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Calnexin Antibody - Images

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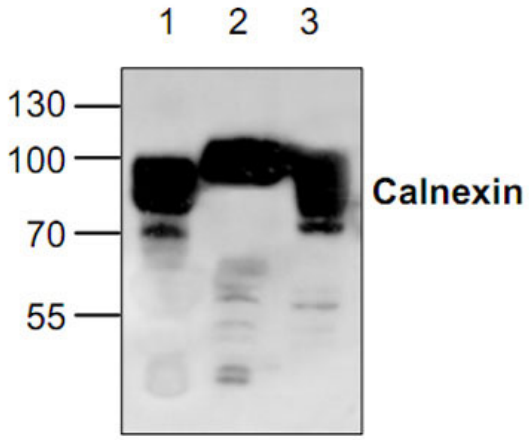


Western blot analysis of Calnexin expression in lysates from rat kidney (Lane 1), 3T3 cells (Lane 2), and Jurkat cells (Lane 3).

**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.