

# Anti-Calnexin CANX Rabbit Monoclonal Antibody

Catalog # ABO13934

### Specification

# Anti-Calnexin CANX Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, FC <u>P27824</u> Rabbit Rabbit IgG Rat, Human Monoclonal Liquid

Anti-Calnexin CANX Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Rat.

### Anti-Calnexin CANX Rabbit Monoclonal Antibody - Additional Information

Gene ID 821

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

Calculated MW 67568 MW KDa

Application Details WB 1:1000-1:2000<br>IHC 1:100-1:500<br>ICC/IF 1:50-1:200<br>FC 1:100

#### Subcellular Localization

Endoplasmic reticulum membrane ; Single-pass type I membrane protein. Endoplasmic reticulum. Melanosome. 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)..

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Calnexin

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.



# Anti-Calnexin CANX Rabbit Monoclonal 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:000250|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}

### Anti-Calnexin CANX Rabbit Monoclonal Antibody - Protocols

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

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

### Anti-Calnexin CANX Rabbit Monoclonal Antibody - Images





## Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Figure 1. Western blot analysis of CANX using anti-CANX antibody (M03372-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human 293T whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CANX antigen affinity purified monoclonal antibody (Catalog # M03372-1) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CANX at approximately 97 kDa. The expected band size for CANX is at 68 kDa.