10320 Camino Santa Fe, Suite G
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Anti-Calnexin Antibody
Mouse Monoclonal Antibody
Catalog # AH13590

Specification

Anti-Calnexin Antibody - Product Information

Application	**WB, IHC-P, IF, FC**
Primary Accession	P27824
Other Accession	567968
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG2b, kappa**
Calculated MW	**67568**

Anti-Calnexin Antibody - Additional Information

Gene ID 821

Other Names
Calnexin; CANX; CNX; IP90; Major histocompatibility complex class I antigen-binding protein p88; P90

Application Note
WB~~1:1000<br \>IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

Format
200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

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

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.

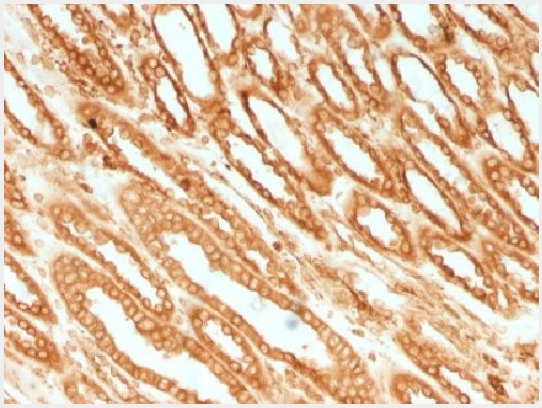
Cellular Location
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:P24643}; Single-pass type I membrane protein. Melanosome membrane; Single-pass type I membrane protein. Note=Identified by mass spectrometry in melanosome fractions from 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}

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

Anti-Calnexin Antibody - Images



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Calnexin Monoclonal Antibody (CANX/1541).

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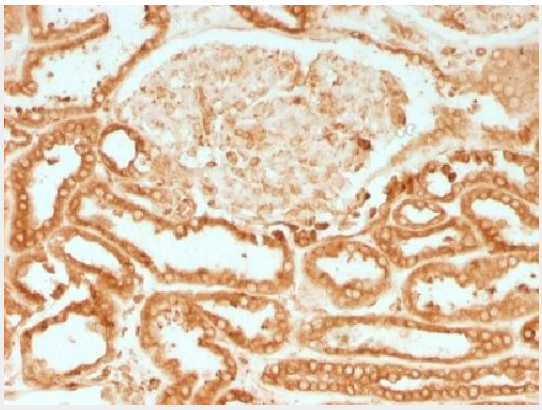
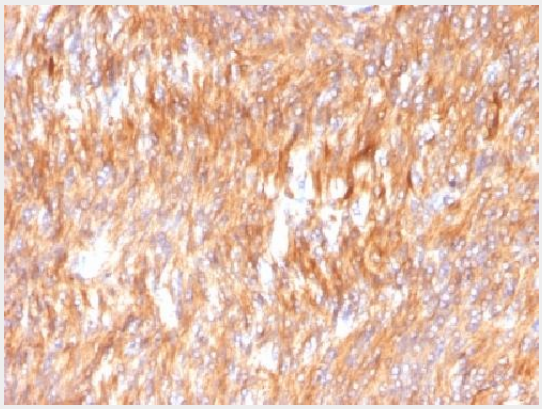


Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Calnexin Monoclonal Antibody (CANX/1541).



Formalin-fixed, paraffin-embedded human Small Intestinal Carcinoma stained with Calnexin Monoclonal Antibody (CANX/1541).

Anti-Calnexin Antibody - Background

It recognizes a protein of 90kDa, which is identified as Calnexin. Secretory and transmembrane proteins are synthesized on polysomes and translocate into the endoplasmic reticulum (ER) where they are often modified by the formation of disulfide bonds, amino-linked glycosylation and folding. To help proteins fold properly, the ER contains a pool of molecular chaperones including calnexin. It 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.