

# CANX / Calnexin Antibody (clone 1D4)

Mouse Monoclonal Antibody Catalog # ALS14316

# **Specification**

# CANX / Calnexin Antibody (clone 1D4) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Dilution
WB, IHC-P, E
P27824
Human
Mouse
Mouse
Monoclonal
68kDa KDa
WB~~1:1000
IHC-P~~N/A

# CANX / Calnexin Antibody (clone 1D4) - Additional Information

#### Gene ID 821

### **Other Names**

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

E~~N/A

# Target/Specificity

**Human Calnexin** 

# **Reconstitution & Storage**

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

#### **Precautions**

CANX / Calnexin Antibody (clone 1D4) is for research use only and not for use in diagnostic or therapeutic procedures.

# CANX / Calnexin Antibody (clone 1D4) - 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



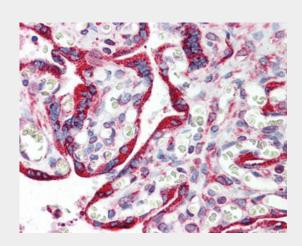
membrane {ECO:0000250|UniProtKB:P24643}; Single-pass type I membrane protein. Melanosome membrane; Single-pass type I membrane protein. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545, PubMed:17081065). The palmitoylated form preferentially localizes 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}

# CANX / Calnexin Antibody (clone 1D4) - 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

# CANX / Calnexin Antibody (clone 1D4) - Images



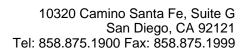
Anti-Calnexin antibody IHC of human placenta.

### CANX / Calnexin Antibody (clone 1D4) - Background

Calcium-binding protein that interacts with newly synthesized 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.

# CANX / Calnexin Antibody (clone 1D4) - References

David V., et al. J. Biol. Chem. 268:9585-9592(1993). Tjoelker L.W., et al. Biochemistry 33:3229-3236(1994). Honore B., et al. Electrophoresis 15:482-490(1994).





Hansen J.J., et al. Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).