

CANX / Calnexin Antibody (clone 3H4A7)
Mouse Monoclonal Antibody
Catalog # ALS13033**Specification**

CANX / Calnexin Antibody (clone 3H4A7) - Product Information

Application	IF, IHC
Primary Accession	P27824
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Horse, Bovine
Host	Mouse
Clonality	Monoclonal
Calculated MW	68kDa KDa

CANX / Calnexin Antibody (clone 3H4A7) - Additional Information**Gene ID** 821**Other Names**

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

Target/Specificity

Human CANX

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CANX / Calnexin Antibody (clone 3H4A7) is for research use only and not for use in diagnostic or therapeutic procedures.

CANX / Calnexin Antibody (clone 3H4A7) - 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}

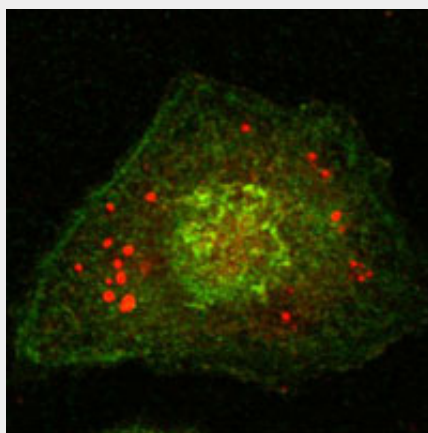
Volume

50 µl

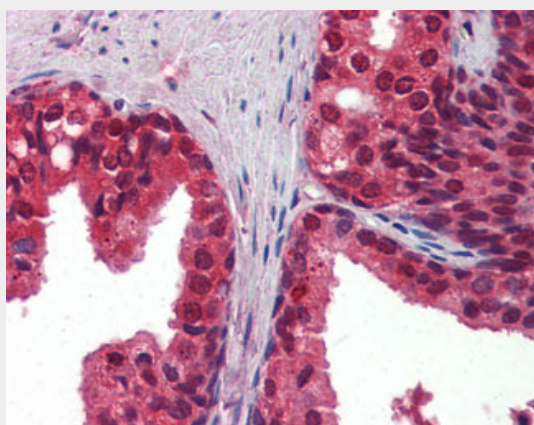
CANX / Calnexin Antibody (clone 3H4A7) - Protocols

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

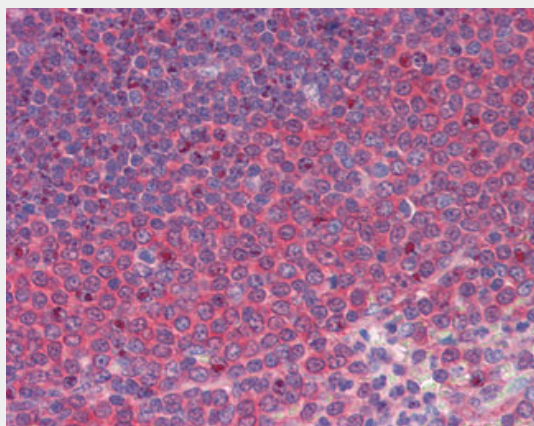
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CANX / Calnexin Antibody (clone 3H4A7) - Images

Confocal immunofluorescence of HeLa cells using Calnexin mouse monoclonal antibody (green).



Anti-Calnexin antibody IHC of human prostate.



Anti-Calnexin antibody IHC of human spleen.

CANX / Calnexin Antibody (clone 3H4A7) - 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 3H4A7) - 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).