

# CANX Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22286b

# **Product Information**

Application	WB, IHC-P, FC, E
Primary Accession	<u>P27824</u>
Other Accession	<u>P24643</u> , <u>P35564</u> , <u>Q5R440</u> , <u>P35565</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56768
Calculated MW	67568

## **Additional Information**

Gene ID	821
Other Names	Calnexin, IP90, Major histocompatibility complex class I antigen-binding protein p88, p90, CANX
Target/Specificity	This CANX antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 560-592 amino acids from human CANX.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CANX Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **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}

# 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.

# 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).

### Images



AP22286b staining CANX in human hepatocarcinoma sections by Immunohistochemistry (IHC-P paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Overlay histogram showing HeLa cells stained with AP22286b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in



2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22286b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-CANX Antibody (C-Term) at 1:2000 dilution Lane 1: PANC-1 lysate Lane 2: Mouse brain lysate Lane 3: Mouse liver lysate Lane 4: Rat liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.