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Calnexin Antibody

Rabbit mAb
Catalog # AP90839

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P27824
Reactivity	Rat, Human
Clonality	Monoclonal
Other Names	Calnexin; CANX; CNX; IP90; Major histocompatibility complex class I antigen-binding protein p88; p90;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	67568

Additional Information

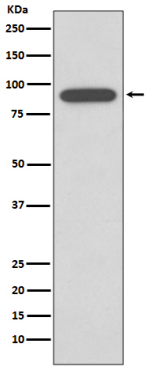
Dilution	WB 1:1000~1:2000 IHC 1:100~1:500 ICC/IF 1:50~1:200 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Calnexin
Description	Calnexin is a calcium-binding protein embedded in the ER membrane that retains the newly synthesized glycoproteins inside the ER to ensure proper folding and quality control (3-5). The specificity of calnexin for a subset of glycoproteins is defined by a lectin site, which binds an early oligosaccharide intermediate on the folding glycoprotein.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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}

Images



Western blot analysis of Calnexin expression in HepG2 cell lysate.