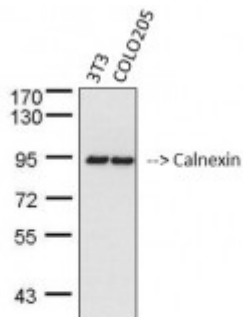


Anti-Calnexin antibody



Western Blot (WB) analysis of 1. 3T3 2. COLO205 using Calnexin Polyclonal Antibody. (STJ91978)



Description

Calnexin is a protein encoded by the CANX gene which is approximately 67,5 kDa. Calnexin is localised to the endoplasmic reticulum membrane. It is involved in class I MHC mediated antigen processing and presentation, assembly of viral components at the budding site and the calnexin/calreticulin cycle. It is a calcium-binding, endoplasmic reticulum-associated protein that interacts transiently with newly synthesized N-linked glycoproteins, facilitating protein folding and assembly. It also plays a central role in the quality control of protein folding by retaining incorrectly folded protein subunits within the ER for degradation. Calnexin is expressed in the nervous system, liver, skin, blood and lung. Mutations in the CANX gene may result in Frey syndrome and orbital melanoma. STJ91978 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Calnexin protein.

Model	STJ91978
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Calnexin around the non-phosphorylation site of S583.
Immunogen Region	520-600 aa
Gene ID	821
Gene Symbol	CANX
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity	Calnexin Polyclonal Antibody detects endogenous levels of Calnexin protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Calnexin IP90 Major histocompatibility complex class I antigen-binding protein p88 p90
Molecular Weight	90 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1473OMIM:114217
Alternative Names	Calnexin IP90 Major histocompatibility complex class I antigen-binding protein p88 p90
Function	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.
Cellular Localization	Endoplasmic reticulum membrane Endoplasmic reticulum Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV . The palmitoylated form preferentially localizes to the perinuclear rough ER .
Post-translational Modifications	Phosphorylated at Ser-564 by MAPK3/ERK1. phosphorylation by MAPK3/ERK1 increases its association with ribosomes . Palmitoylation by DHHC6 leads to the preferential localization to the perinuclear rough ER. It mediates the association of calnexin with the ribosome-translocon complex (RTC) which is required for efficient folding of glycosylated proteins. Ubiquitinated, leading to proteasomal degradation. Probably ubiquitinated by ZNRF4.