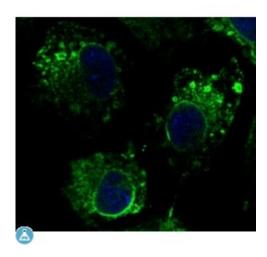


Anti-CANX antibody



Description

Goat polyclonal to CANX (Calnexin) - endoplasmic reticulum (ER) membrane marker. CANX is a member of the Calnexin family of molecular chaperones. This protein is a calcium-binding, ER-associated protein that interacts transiently with newly synthesized Nlinked glycoproteins, facilitating protein folding and assembly. It may also play a central role in the quality control of protein folding by retaining incorrectly folded protein subunits within the ER for degradation.

Model STJ140017

Host Goat

Reactivity Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse,

Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian

Applications IF, IHC, WB

Immunogen Purified recombinant peptide within residues 550 aa to the C-terminus of

human CANX produced in E. coli.

Immunogen Region C-Term

Gene ID <u>821</u>

Gene Symbol CANX

Dilution range Western blot 1:500-1:5,000 Immunofluorescence 1:50-1:500

Immunohistochemistry (paraffin) 1:200-1:1,000 Immunohistochemistry

(frozen) 1:200-1:1,000

Specificity Detects a band of 90 kDa by Western blot in the following human (293A,

primary fibroblasts, HaCat, HeLa, HMEC-1, Jurkat, MNT1, U-118, rat (TR-iBRB), mouse (3T3, AtT-20, Hepa, Raw264.7), monkey (COS-7) and canine

(D17) whole cell lysates.

Purification This antibody is epitope-affinity purified from goat antiserum.

Note For research use only (RUO).

Protein Name calnexin CALX CNX FLJ26570 histocompatibility complex class I antigen

binding protein p88 IP90 major histocompatibility complex class I antigen-

binding protein p88 MS952 P90

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS, 20% glycerol and 0.05% sodium azide.

Concentration 2 mg/mL

Storage Instruction Store at -20°, and avoid repeated freeze-thaw cycles.

Database Links <u>HGNC:1473OMIM:114217</u>

Alternative Names calnexin CALX CNX FLJ26570 histocompatibility complex class I antigen

binding protein p88 IP90 major histocompatibility complex class I antigen-

binding protein p88 MS952 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 Single-pass type I membrane protein.

Endoplasmic reticulum . Melanosome . 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). .

Post-translational Phosphorylated at Ser-564 by MAPK3/ERK1. phosphorylation by

Modifications MAPK3/ERK1 increases its association with ribosomes . {ECO:0000250}.;

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. {ECO:0000269|PubMed:22314232}.; Ubiquitinated, leading to proteasomal degradation. Probably ubiquitinated by ZNRF4.

{ECO:0000269|PubMed:21205830}.