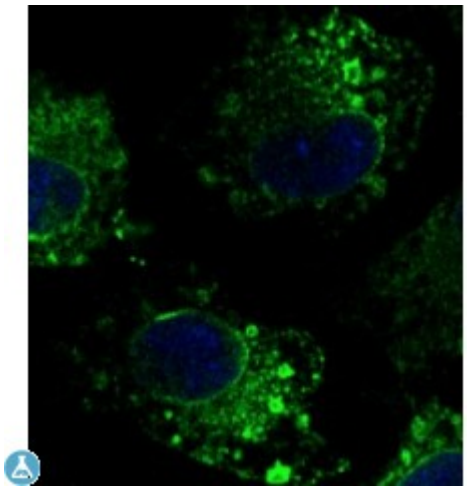
Anti-CANX antibody



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	STJ140016
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	821
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	3 mg/mL
Storage Instruction	Store at -20°, and avoid repeated freeze-thaw cycles.
Database Links	HGNC:1473OMIM:114217
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 Modifications	Phosphorylated at Ser-564 by MAPK3/ERK1. phosphorylation by 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}.