

Calnexin-CT Antibody
Catalog # ASM10440

Specification

Calnexin-CT Antibody - Product Information

Application	WB, IHC
Primary Accession	P24643
Other Accession	NP_001003232.1
Host	Rabbit
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Quail, Bovine, Xenopus, Dog, Sheep, Guinea Pig, Drosophila
Clonality	Polyclonal
Format	Biotin

Description

Rabbit Anti-Dog Calnexin-CT Polyclonal

Target/Specificity

Detects the C-terminal domain of Calnexin ~90kDa. Weak detection in Chicken, Drosophila, and Xenopus tissues.

Other Names

Calnexin antibody, CALX_HUMAN antibody, CANX antibody, CNX antibody, FLJ26570 antibody, Histocompatibility complex class I antigen binding protein p88 antibody, IP90 antibody, Major histocompatibility complex class I antigen-binding protein p88 antibody, P90 antibody

Immunogen

Dog Calnexin C-terminal synthetic peptide conjugated to KLH. Identical to human, mouse and rat calnexin sequences over these residues.

Purification

Protein A Purified

Storage -20°C

Storage Buffer

PBS pH7.2, 50% glycerol, 0.09% sodium azide

Shipping Temperature

Blue Ice or 4°C

Certificate of Analysis

A 1:2000 dilution of SPC-182 was sufficient for detection of Calnexin in 10 µg of HeLa cell lysate by ECL immunoblot analysis.

Cellular Localization

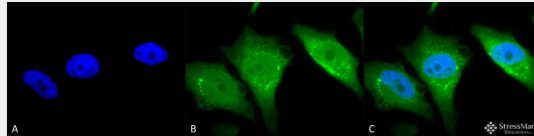
Endoplasmic Reticulum | Endoplasmic Reticulum Membrane | Melanosome

Calnexin-CT Antibody - Protocols

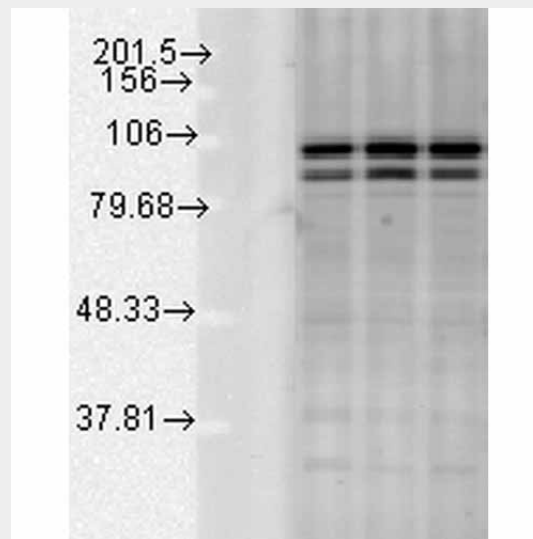
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

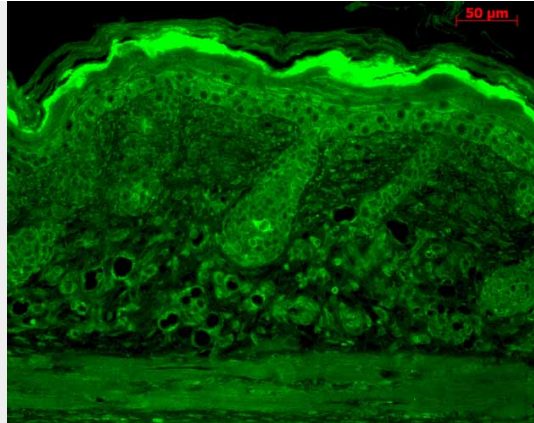
Calnexin-CT Antibody - Images



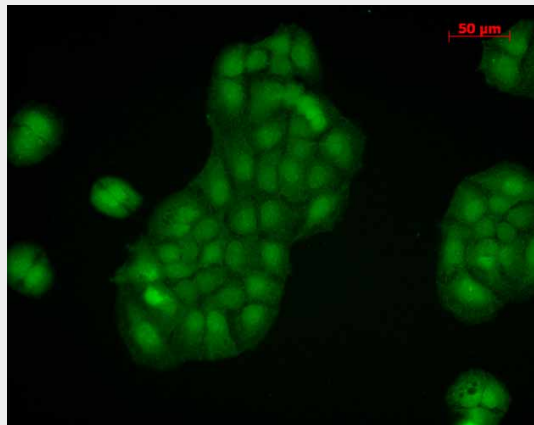
Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440) at 1:80 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum membrane. Melanosome. Magnification: 100x. Heat Shocked at 42°C for 1h.



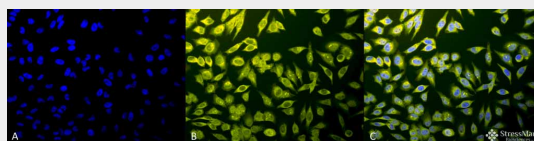
Western blot analysis of Rat tissue mix showing detection of Calnexin-CT protein using Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440). Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440) at 1:1000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.



Immunohistochemistry analysis using Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: Hair Follicles, Basal cells in epidermis, and second layer of epidermis.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol at -20C for 10 minutes. Primary Antibody: Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit at 1:50 for 1-2 hours at RT in dark. Localization: Nuclear staining, cytoplasmic staining.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Calnexin-CT Polyclonal Antibody (ASM10440) at 1:80 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum membrane. Melanosome. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Calnexin-CT Antibody. (C) Composite. Heat Shocked at 42°C for 1h.

Calnexin-CT Antibody - Background

Calnexin, an abundant ~90kDa integral protein of the endoplasmic reticulum, is also referred to as IP90, p88 and p90 (1). It consists of a large 50kDa N-terminal calcium-binding luminal domain, a single transmembrane helix and a short acidic cytoplasmic tail (2, 3). Unlike its ER counterparts

which have a KDEL sequence on their C-terminus to ensure ER retention (4), calnexin has positively charged cytosolic residues that do the same thing (3). Most ER proteins act as molecular chaperones and participate in the proper folding of polypeptides and their assembly into multi-subunit proteins. Calnexin together with calreticulin, plays a key role in glycoprotein folding and its control within the ER, by interacting with folding intermediates via their mono-glycosylated glycans (5, 6). Calnexin has also been shown to associate with the major histocompatibility complex class I heavy chains, partial complexes of the T cell receptor and B cell membrane immunoglobulin (7).

Calnexin-CT Antibody - References

1. Rajagopalan S., Xu Y., and Brenner M.B. (1994) *Science*. 263(5145): 387-90.
2. Tjoelker L.W., et al. (1994) *Biochemistry*. 33: 3229.
3. Schrag J. et al. (2001) *Molecular Cell*. 8(3): 633-644.
4. Janiszewski M. (2005) *J. Biol Chem*. 280(49): 40813-40819.
5. Elagoz A., Callejo M., Armstrong J., and Rokeach L. A. (1999) *J. Cell Sci*. 112: 4449-4460.
6. Otteken A. and Moss B. (1996) *J Bio Chem*. 271(1): 97-103.
7. Galvin K. et al. (1992) *Proc Natl Acad Sci USA*. 89(18): 8452-6.