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Calnexin-NT Antibody
Catalog # ASM10393

Specification

Calnexin-NT 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, Bovine, Dog, Sheep, Guinea Pig**
Clonality	**Polyclonal**

Description
Rabbit Anti-Human Calnexin-NT Polyclonal

Target/Specificity
Detects the N-terminal domain of Calnexin ~90kDa.

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
A 19 residue synthetic peptide based on dog calnexin and the peptide coupled to KLH

Purification
Rabbit Antiserum

Storage	**-20ºC**

Storage Buffer
Rabbit Antiserum

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:5000 dilution of SPC-127 was sufficient for detection of Calnexin in 20 µg of HeLa cell lysate by ECL immunoblot analysis.

Cellular Localization
Endoplasmic Reticulum | Endoplasmic Reticulum Membrane | Melanosome

Calnexin-NT Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot

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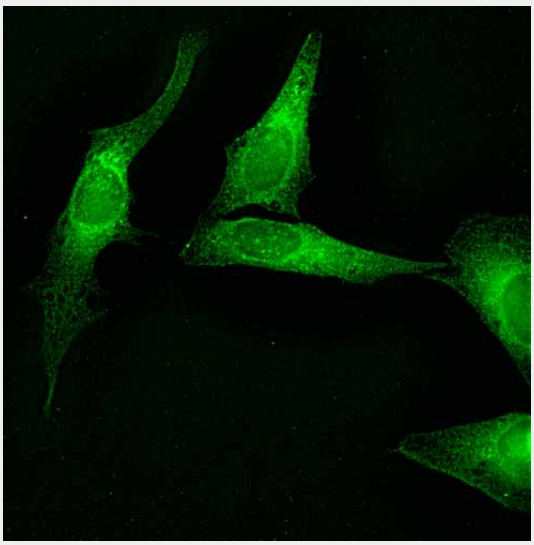
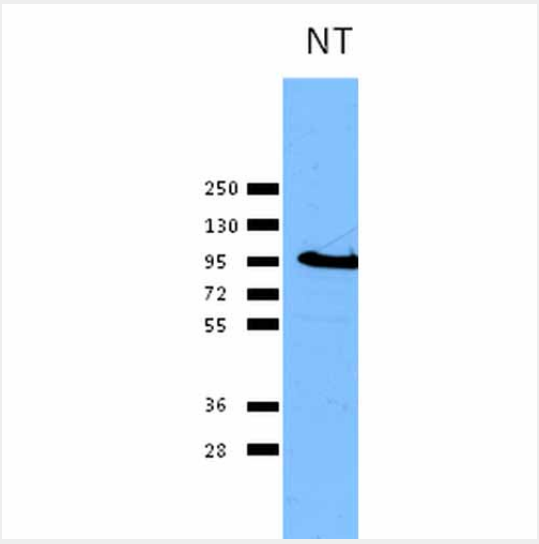
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Calnexin-NT Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393). Tissue: HeLa cells. Species: Human. Primary Antibody: Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393) at 1:100. Secondary Antibody: FITC Goat Anti-Rabbit (green).



Western blot analysis of Human HeLa cell lysates showing detection of Calnexin protein using Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393). Primary Antibody: Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393) at 1:1000.

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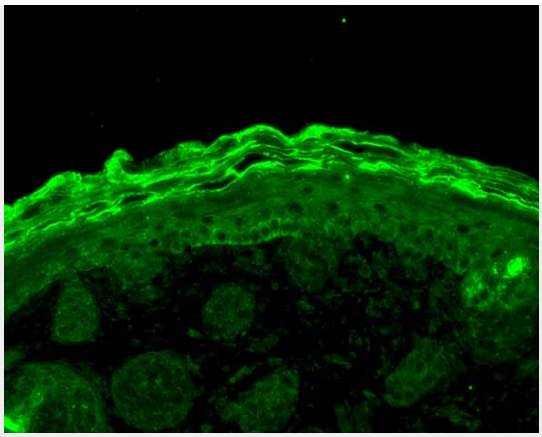
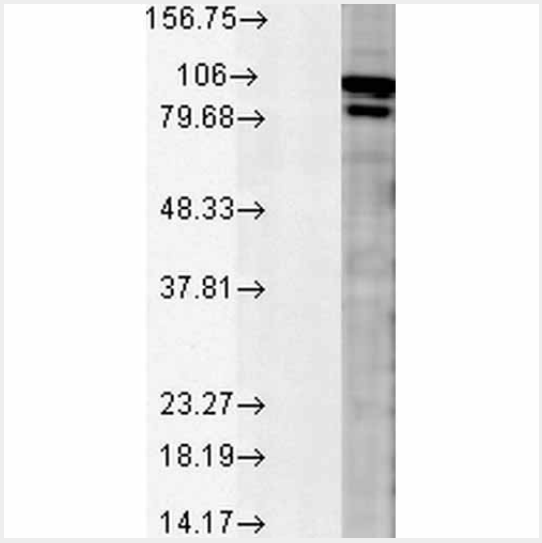
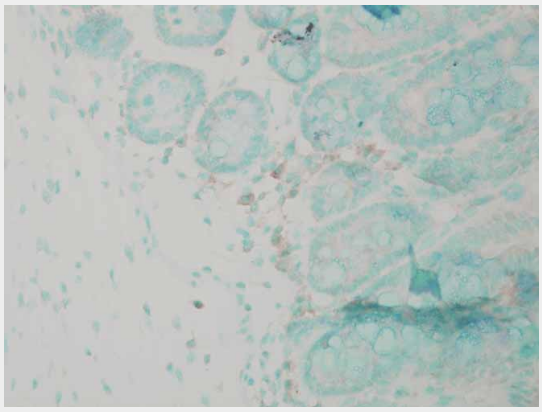


Immunohistochemistry analysis using Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: Upper layer staining and few basal cell cytoplasmic staining.



Western blot analysis of Rat tissue mix showing detection of Calnexin protein using Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393). Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393) at 1:5000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.



Immunohistochemistry analysis using Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393).

Tissue: colon colitis. Species: Mouse. Fixation: Formalin. Primary Antibody: Rabbit Anti-Calnexin Polyclonal Antibody (ASM10393) at 1:100000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Rabbit at 1:2000 for 1 hour at RT. Counterstain: Methyl Green at 200uL for 2 min at RT. Localization: Inflammatory cells.

Calnexin-NT 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 mulit-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-NT Antibody - References

1. Rajagopalan S., Xu Y., and Brenner M.B. (1994) Science 263(5145): 387-90.
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3. Schrag J. et al. (2001) Molecular Cell 8(3): 633-644.
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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.
8. Raggo C., et al. (2002) Mol Cell Biol. 22: 5639-5649.
9. Rubio M.E., and Wenthold R.J. (1999) J Neurochem. 73: 942-948.