

Datasheet for 100-401-E98**Calnexin -NT Antibody****Overview**

Description:	Anti-Calnexin-NT (RABBIT) Antibody - 100-401-E98
Item No.:	100-401-E98
Size:	200 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat, Dog
Host Species:	Rabbit

Product Details

Background: Calnexin, an abundant ~90kDa integral protein of the endoplasmic reticulum, is also referred to as IP90, p88 and p90. It consists of a large 50kDa N-terminal calcium-binding luminal domain, a single transmembrane helix and a short acidic cytoplasmic tail. Unlike its ER counterparts which have a KDEL sequence on their C-terminus to ensure ER retention, calnexin has positively charged cytosolic residues that do the same thing. 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 monoglycosylated glycans. 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.

Synonyms:	CANX, CNX, IP90, P90, Calnexin, pp90
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CANX
Reactivity:	Human, Mouse, Rat, Dog
Immunogen Type:	Conjugated Peptide

Immunogen:	Calnexin-NT Antibody was produced from whole rabbit serum prepared by repeated immunizations with a 19 residue synthetic peptide of dog calnexin.
Purity/Specificity:	Anti-Calnexin -NT Antibody was prepared from monospecific antiserum by delipidation and defibrination. A BLAST analysis was used to suggest cross-reactivity with Calnexin -NT from Human, Mouse, Rat, Bovine, Chicken, Dog, Guinea Pig, Hamster, Pig, Monkey, Rabbit, Sheep, and Xenopus based on 100% homology with the immunizing sequence. Cross-reactivity with Calnexin -NT from other sources has not been determined. Cell Signaling and Organelle Marker research.
Relevant Links:	• NCBI - NP_001003232.1 • GeneID - 403908 • UniProtKB - P24643

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Calnexin -NT Antibody has been tested in WB, IP, IHC and IF microscopy. Expect a band approximately ~90kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IP:	User Optimized
WB:	1:5000-10000

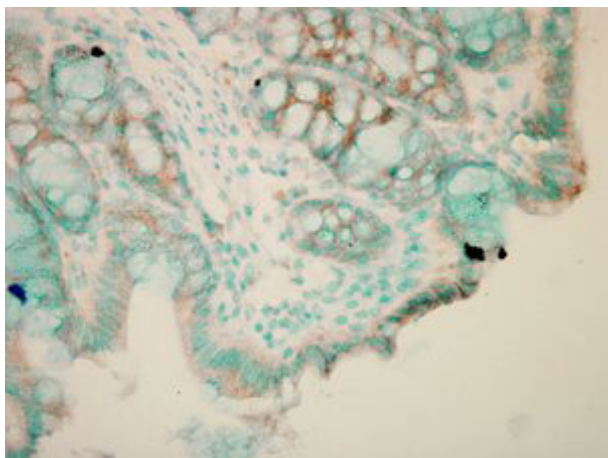
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	85 mg/mL by Refractometry

Shipping & Handling

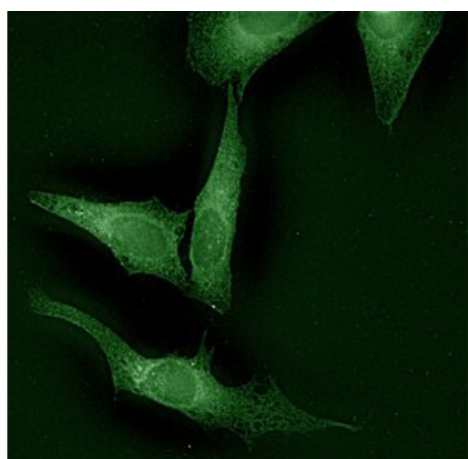
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



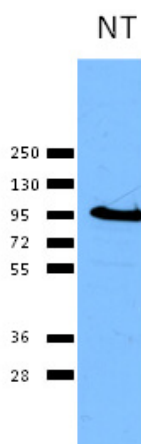
Immunohistochemistry

Immunohistochemistry of Rabbit anti-Calnexin NT. Tissue: Mouse colon with colitis. Fixation: N/A. Primary Antibody: anti-Calnexin-NT at 1 μ g/ml for 1h at RT. Secondary antibody: Peroxidase rabbit secondary at 1:10,000 for 45 min at RT. Localization: Endoplasmic reticulum membrane. Staining: anti-Calnexin-NT as precipitated green signal.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of rabbit anti-Calnexin NT antibody. Tissue: HeLa cell. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Calnexin NT antibody at 10 μ g/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min RT. Localization: Endoplasmic reticulum membrane. Staining Calnexin NT green fluorescent signal.



Western Blot

Western Blot of Rabbit anti-Calnexin NT antibody. Lane 1: HeLa cell. Lane 2: none. Load: 35 μ g per lane. Primary antibody: Calnexin NT antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 67.6 kDa, 90 kDa for Calnexin NT.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.