Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-J15

Calnexin Antibody

Overview

Description:	Anti-Calnexin (RABBIT) Antibody - 600-401-J15
Item No.:	600-401-J15
Size:	100 µg
Reactivity:	Human, Mouse, Rat, Chicken, Primate
Host Species:	Rabbit

Product Details

Background:	Calnexin, also referred to as IP90, p88 and p90, is an ~90 kDa integral membrane protein of the endoplasmic reticulum (ER). Many resident ER proteins act as molecular chaperones and participate in the proper folding of polypeptides and their assembly into multisubunit proteins. Studies indicate that calnexin associates with the major histocompatibility complex (MHC) class I heavy chains, partial complexes of the T cell receptor and B cell membrane immunoglobulin, but not with completed receptor complexes. It has been shown that calnexin is a chaperone that retains incompletely or improperly folded proteins in the ER. The sequence Lys-Asp-Glu-Leu (KDEL) or a closely related sequence, is present at the carboxy-terminus of soluble ER resident proteins such as GRP 78 and GRP 94 and protein disulfide isomerase. Integral membrane ER resident proteins, like calnexin, often lack this KDEL sequence but contain positively charged cytosolic residues that ensure ER retention. Calnexin contains a large ER luminal domain (461 amino acids), a transmembrane segment (22 amino acids), and a cytoplasmic tail (89 amino acids). These features distinguish calnexin from soluble ER chaperones that cannot interact with the transmembrane and cytosolic domains of integral membrane proteins. The amino acid sequence of calnexin is highly conserved among species, and shares regions of high sequence homology with calreticulin. Anti-Calnexin antibody is ideal for researchers interested in ER Markers, Neuroscience, and Vision research.
Synonyms:	rabbit anti-calnexin antibody, CANX, Major histocompatibility complex class I antigen-binding protein p88, p90, IP90
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CANX
Reactivity:	Human, Mouse, Rat, Chicken, Primate
Immunogen Type:	Conjugated Peptide
Immunogen:	Calnexin affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-terminus of human Calnexin.
Purity/Specificity:	Anti-Calnexin was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards calnexin. A BLAST analysis was used to suggest cross-reactivity with Human, Mouse, Rat, Primate and Chicken based on 100% sequence homology. Cross-reactivity with calnexin from other sources has not been determined.
Relevant Links:	• UniProtKB - P27824 • NCBI - NP_001019820.1 • GeneID - 821

Application Details

Application Note:	Anti-Calnexin antibody is useful for ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~67.7 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:60,000
IF:	1:100-1:500
IHC:	1:100-1:500
WB:	0.2 µg/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.34 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	50% (v/v) Glycerol

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 six (6) months from date of receipt.

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.