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Product Datasheet

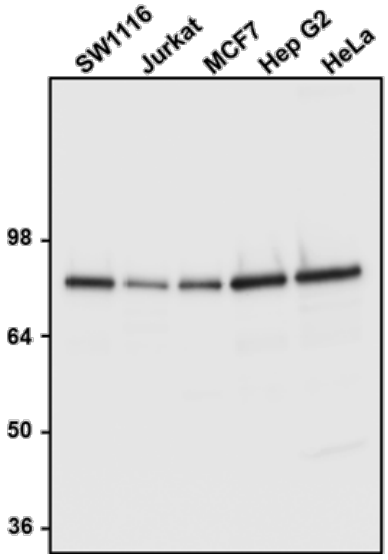
Chickens make *better* antibodies.

Anti-Calnexin Antibody

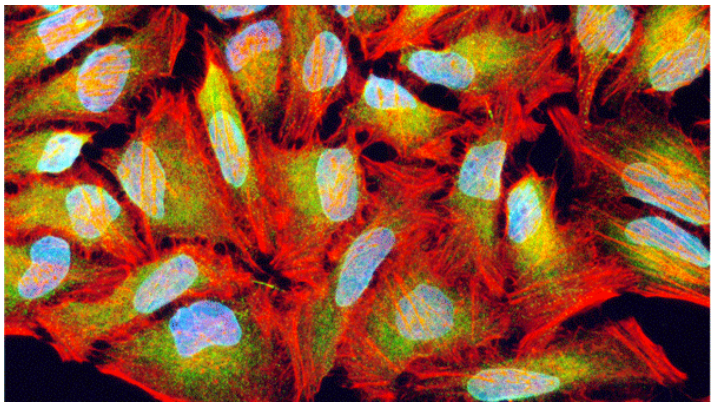
Overview

Catalog #	CANX-0100 (500 µL size) or CANX-0020 (100 µL size)
Concentration	0.2 mg/mL
Host Species	Chicken Polyclonal
Format	Affinity-Purified IgY
Buffer	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%, w/v) added as a preservative.
Applications	ICC 1:100-1:500 IHC 1:100-1:500 WB 1:200-1:10000
Species Reactivity	Human, Mouse, and Rat
Immunogen	Synthetic peptide
Molecular Weight	90 kDa
Cite this Antibody	Aves Labs Cat# CANX-0100 or Aves Labs Cat# CANX-0020; RRID: AB_3105808

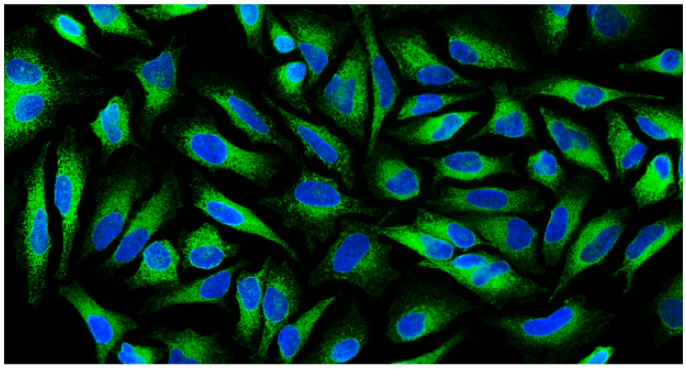
Images



Western blotting of various cell lysates with Aves Labs chicken anti-Calnexin (CANX) antibody (0.05 µg/ml) and detected with anti-chicken HRP. Chicken anti-Calnexin recognizes endogenous Calnexin in all the cell lysates at ~90 kDa.



Immunofluorescent staining of HeLa cells using 2 µg/mL chicken anti-Calnexin (CANX) antibody (green). Actin filaments were stained using Phalloidin (red). DAPI nuclear stain (blue) shows cell nuclei. The cells were mounted with Antibodies Incorporated Fluoroshield with DAPI mounting medium (Cat. No. AR-6501). Anti-Calnexin specifically stains the Endoplasmic Reticulum in HeLa cells.



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Details

Target Description

Calnexin is a vital chaperone protein involved in the quality control of glycoprotein folding within the endoplasmic reticulum (ER), facilitating correct folding and preventing aggregation. Calnexin's calcium-dependent binding highlights its role in calcium homeostasis within the ER. The importance of calnexin extends beyond protein folding; it is crucial for immune function, as it assists in the assembly of major histocompatibility complex (MHC) class I molecules, thus playing a part in antigen presentation. Defects or dysregulation in calnexin prominently feature in cystic fibrosis (Pind et al. 1994), where misfolding of the CFTR glycoprotein is not efficiently managed by the calnexin cycle, leading to its degradation and resulting in disease. Due to its importance in protein folding and homeostasis, calnexin dysfunction can also lead to neurodegenerative disorders including Alzheimer's, Parkinson's, ALS, and Huntington's. Dysregulation of these processes can also contribute to tumor development and progression, making calnexin a critical player in cancers including breast, prostate, liver, and lung. Recent studies have identified calnexin as a dual-role biomarker in lung cancer by utilizing anti-Calnexin antibodies for both diagnostic and therapeutic targeting (Lim et al. 2024).

Purification Method

Eggs from hens hyperimmunized with target were used to prepare an IgY fraction which was then subjected to antigen-specific affinity purification.

Quality Control Tests

Each new lot of this antibody is tested in WB to confirm that it recognizes a single immunoreactive band of expected molecular weight when used to probe HeLa lysate.

Storage

Store at 4°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile. For longer term storage, aliquot and freeze to avoid freeze-thaw of the antibody.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience how chickens make better antibodies.