

**Anti-Calnexin (pS583) Antibody**  
**Rabbit polyclonal antibody to Calnexin (pS583)**  
**Catalog # AP59498**

## Specification

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### Anti-Calnexin (pS583) Antibody - Product Information

Application	WB, IF
Primary Accession	<a href="#">P27824</a>
Other Accession	<a href="#">P35564</a>
Reactivity	Human, Mouse, Rat, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67568

### Anti-Calnexin (pS583) Antibody - Additional Information

Gene ID 821

#### Other Names

Calnexin; IP90; Major histocompatibility complex class I antigen-binding protein p88; p90

#### Target/Specificity

Recognizes endogenous levels of Calnexin (pS583) protein.

#### Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100)  
IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### Anti-Calnexin (pS583) Antibody - Protein Information

Name CANX

#### Function

Calcium-binding protein that interacts with newly synthesized monoglucosylated glycoproteins in the endoplasmic reticulum. It may act in assisting protein assembly and/or in the retention within the ER of unassembled protein subunits. It seems to play a major role in the quality control apparatus of the ER by the retention of incorrectly folded proteins. Associated with partial T-cell antigen receptor complexes that escape the ER of immature thymocytes, it may function as a signaling complex regulating thymocyte maturation. Additionally it may play a role in receptor-mediated endocytosis at the synapse.

### Cellular Location

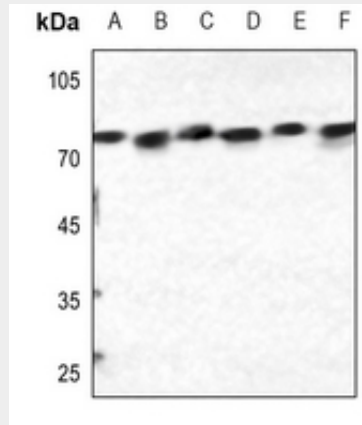
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:P24643}; Single-pass type I membrane protein. Melanosome membrane; Single-pass type I membrane protein. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545, PubMed:17081065). The palmitoylated form preferentially localizes to the perinuclear rough ER (PubMed:22314232) Localizes to endoplasmic reticulum mitochondria-associated membrane (MAMs) that connect the endoplasmic reticulum and the mitochondria (By similarity). {ECO:0000250|UniProtKB:P24643, ECO:0000269|PubMed:12643545, ECO:0000269|PubMed:17081065, ECO:0000269|PubMed:22314232}

### Anti-Calnexin (pS583) Antibody - Protocols

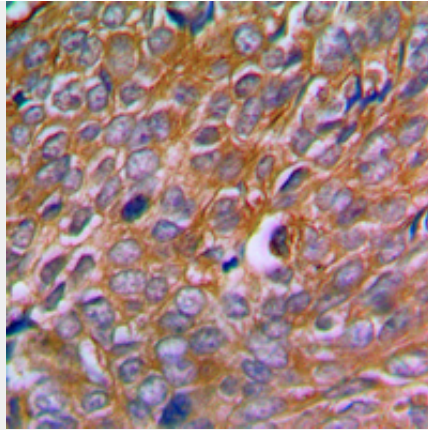
Provided below are standard protocols that you may find useful for product applications.

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

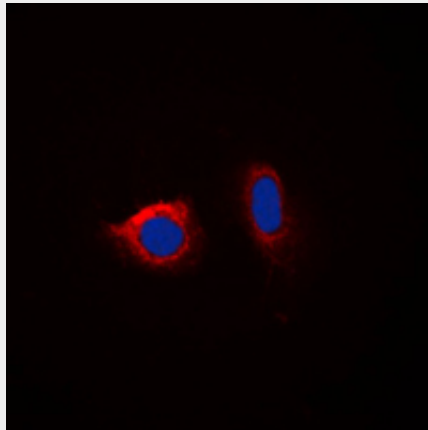
### Anti-Calnexin (pS583) Antibody - Images



Western blot analysis of Calnexin (pS583) expression in HEK293T (A), SHSY5Y (B), A549 (C), mouse spleen (D), mouse lung (E), rat spleen (F), rat lung (G) whole cell lysates.



Immunohistochemical analysis of Calnexin (pS583) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Calnexin (pS583) staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

#### **Anti-Calnexin (pS583) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Calnexin. The exact sequence is proprietary.