

#### **KD-Validated Anti-Calnexin Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI1235

### **Specification**

# **KD-Validated Anti-Calnexin Rabbit Monoclonal Antibody - Product Information**

Application WB, FC, ICC
Primary Accession P27824
Reactivity Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 68 kDa , observed, 90 kDa KDa

Gene Name CANX

Aliases CANX; Calnexin; IP90; P90; Major

Histocompatibility Complex Class I Antigen-Binding Protein P88; CNX; Epididymis Secretory Sperm Binding

**Protein** 

Immunogen A synthesized peptide derived from human

**Calnexin** 

# KD-Validated Anti-Calnexin Rabbit Monoclonal Antibody - Additional Information

Gene ID 821

**Other Names** 

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

# **KD-Validated Anti-Calnexin Rabbit Monoclonal 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,



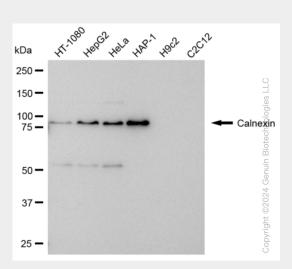
ECO:0000269|PubMed:12643545, ECO:0000269|PubMed:17081065, ECO:0000269|PubMed:22314232}

# **KD-Validated Anti-Calnexin Rabbit Monoclonal Antibody - Protocols**

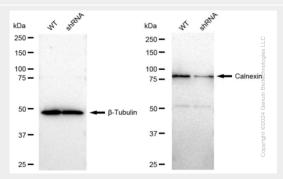
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# KD-Validated Anti-Calnexin Rabbit Monoclonal Antibody - Images

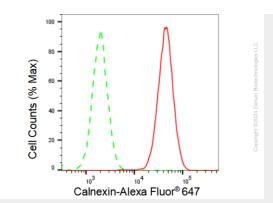


Western blotting analysis using anti-Calnexin antibody (Cat#AGI1235). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Calnexin antibody (Cat#AGI1235, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

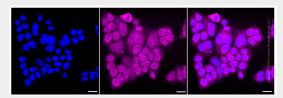


Western blotting analysis using anti-Calnexin antibody (Cat#AGI1235). Calnexin expression in wild type (WT) and calnexin shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Calnexin antibody (Cat#AGI1235, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Flow cytometric analysis of Calnexin expression in HAP-1 cells using Calnexin antibody (Cat#AGI1235, 1:2,000). Green, isotype control; red, Calnexin.



Immunocytochemical staining of HAP-1 cells with Calnexin antibody (Cat#AGI1235, 1:1,000). Nuclei were stained blue with DAPI; Calnexin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20  $\mu$ m.