

### Anti-Calnexin (N-terminal region) Antibody

Catalog # AN1667

## **Specification**

# Anti-Calnexin (N-terminal region) Antibody - Product Information

Application WB
Primary Accession P27824
Reactivity Bovine
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 67568

### Anti-Calnexin (N-terminal region) Antibody - Additional Information

Gene ID
Other Names
IP90, P90

821

### **Target/Specificity**

Calnexin is a 90 kDa integral membrane protein located primarily in the endoplasmic reticulum (ER). The structure of calnexin includes a long N-terminal calcium-binding domain that extends into the lumen of the ER and a short, acidic cytosolic domain. Calnexin associates with several cell surface proteins as they pass through the ER, and may be involved in the Ca2+-dependent retention of proteins in the ER. The amino acid sequence of calnexin is highly conserved among various species and is similar in sequence to calreticulin, another Ca2+-binding protein found in the ER. Phosphorylation may regulate the activity of the C-terminal region of Calnexin. Both proline-dependent kinase and casein kinase sites have been identified, and the phosphorylation of these sites may regulate calnexin functions involved with detection of ER protein quality control and transport.

#### **Format**

Protein A Purified

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Anti-Calnexin (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Shipping**

Blue Ice

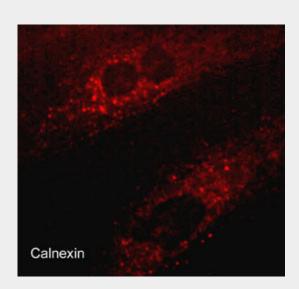
## Anti-Calnexin (N-terminal region) Antibody - Protocols

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

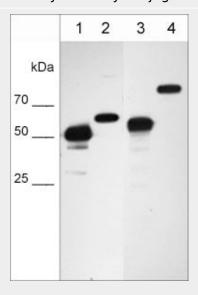


- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Anti-Calnexin (N-terminal region) Antibody - Images



Immunocytochemical labeling in paraformaldehyde fixed and NP-40 permeabilized rat A7r5 cells. The cells were labeled with mouse monoclonal Anti-Calnexin (CM4371), then the antibody was detected using Goat anti-Mouse secondary antibody conjugated to DyLight® 594.



Western blot image of cell structure markers in NCI-H1915 lung carcinoma cells. The blot was probed with anti-Vimentin intermediate filament protein VM4341 (lane 1), anti-Nucleoporin p62 NM4361 (lane 2), anti-Hsp60 mitochondrial protein HM4381 (lane 3), and anti-Calnexin endoplasmic reticulum protein CM4371 (lane 4).

### Anti-Calnexin (N-terminal region) Antibody - Background

Calnexin is a 90 kDa integral membrane protein located primarily in the endoplasmic reticulum





Tel: 858.875.1900 Fax: 858.875.1999

(ER). The structure of calnexin includes a long N-terminal calcium-binding domain that extends into the lumen of the ER and a short, acidic cytosolic domain. Calnexin associates with several cell surface proteins as they pass through the ER, and may be involved in the Ca2+-dependent retention of proteins in the ER. The amino acid sequence of calnexin is highly conserved among various species and is similar in sequence to calreticulin, another Ca2+-binding protein found in the ER. Phosphorylation may regulate the activity of the C-terminal region of Calnexin. Both proline-dependent kinase and casein kinase sites have been identified, and the phosphorylation of these sites may regulate calnexin functions involved with detection of ER protein quality control and transport.