

# calreticulin Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF4081a

## **Specification**

## calreticulin Antibody (internal region) - Product Information

Application WB, E
Primary Accession P27797

Other Accession NP\_004334.1, 811, 12317 (mouse), 64202 (rat)

Reactivity Human

Predicted Mouse, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 48142

## calreticulin Antibody (internal region) - Additional Information

### Gene ID 811

## **Other Names**

Calreticulin, CRP55, Calregulin, Endoplasmic reticulum resident protein 60, ERp60, HACBP, grp60, CALR, CRTC

#### **Dilution**

WB~~1:1000 E~~N/A

### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

# 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**

calreticulin Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### calreticulin Antibody (internal region) - Protein Information

Name CALR (HGNC:1455)

**Synonyms** CRTC

## **Function**



Calcium-binding chaperone that promotes folding, oligomeric assembly and quality control in the endoplasmic reticulum (ER) via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER (PubMed:<a href="http://www.uniprot.org/citations/7876246" target="\_blank">7876246</a>). Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export (PubMed:<a href="http://www.uniprot.org/citations/11149926" target="\_blank">11149926</a>). Involved in maternal gene expression regulation. May participate in oocyte maturation via the regulation of calcium homeostasis (By similarity). Present in the cortical granules of non-activated oocytes, is exocytosed during the cortical reaction in response to oocyte activation and might participate in the block to polyspermy (By similarity).

### **Cellular Location**

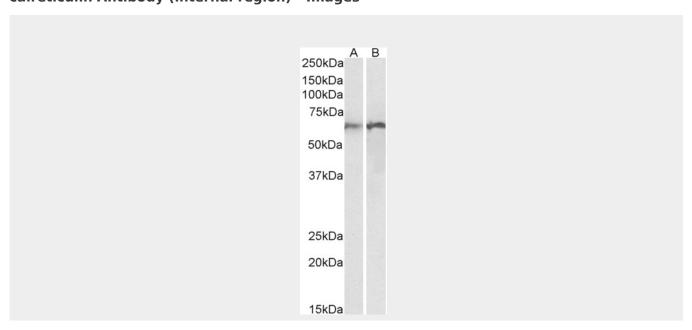
Endoplasmic reticulum lumen. Cytoplasm, cytosol. Secreted, extracellular space, extracellular matrix. Cell surface. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P28491}. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:Q8K3H7}. Cytolytic granule. Note=Also found in cell surface (T cells), cytosol and extracellular matrix (PubMed:10358038). During oocyte maturation and after parthenogenetic activation accumulates in cortical granules. In pronuclear and early cleaved embryos localizes weakly to cytoplasm around nucleus and more strongly in the region near the cortex (By similarity). In cortical granules of non-activated oocytes, is exocytosed during the cortical reaction in response to oocyte activation (By similarity). {ECO:0000250|UniProtKB:P28491, ECO:0000250|UniProtKB:Q8K3H7, ECO:0000269|PubMed:8418194}

### calreticulin Antibody (internal region) - Protocols

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

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

## calreticulin Antibody (internal region) - Images







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EB12387 (0.01μg/ml) staining of Human (A) and Rat (B) Lung lysates (35μg protein in RIPA buffer). Detected by chemiluminescence.

# calreticulin Antibody (internal region) - References

The polypeptide binding conformation of calreticulin facilitates its cell-surface expression under conditions of endoplasmic reticulum stress. Jeffery E, Peters LR, Raghavan M. The Journal of biological chemistry 2011 Jan 286 (4): 2402-15. PMID: 21075854