

### CALR / Calreticulin Antibody (clone 1G11-1A9)

Mouse Monoclonal Antibody Catalog # ALS14024

### **Specification**

### CALR / Calreticulin Antibody (clone 1G11-1A9) - Product Information

Application WB, IHC
Primary Accession P27797
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 48kDa KDa

### CALR / Calreticulin Antibody (clone 1G11-1A9) - Additional Information

#### Gene ID 811

#### **Other Names**

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

# **Target/Specificity**

Human Calreticulin

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

#### **Precautions**

CALR / Calreticulin Antibody (clone 1G11-1A9) is for research use only and not for use in diagnostic or therapeutic procedures.

### CALR / Calreticulin Antibody (clone 1G11-1A9) - 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**

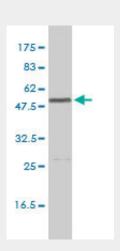
Endoplasmic reticulum lumen. Cytoplasm, cytosol. Secreted, extracellular space, extracellular matrix. Cell surface. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P28491}. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:Q8K3H7}. Cytolytic granule. Note=Also found 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}

## CALR / Calreticulin Antibody (clone 1G11-1A9) - Protocols

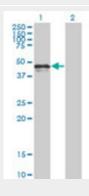
Provided below are standard protocols that you may find useful for product applications.

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

## CALR / Calreticulin Antibody (clone 1G11-1A9) - Images

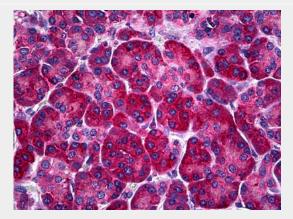


Western blot of CALR expression in K-562 by CALR monoclonal antibody (M01), clone 1G11-1A9.





Western blot of CALR expression in transfected 293T cell line by CALR monoclonal antibody (M01),...



Anti-Calreticulin antibody IHC of human pancreas.

### CALR / Calreticulin Antibody (clone 1G11-1A9) - Background

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. Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export. Involved in maternal gene expression regulation. May participate in oocyte maturation via the regulation of calcium homeostasis (By similarity).

### CALR / Calreticulin Antibody (clone 1G11-1A9) - References

McCauliffe D.P.,et al.J. Clin. Invest. 85:1379-1391(1990). Rokeach L.A.,et al.J. Immunol. 147:3031-3039(1991). McCauliffe D.P.,et al.J. Biol. Chem. 267:2557-2562(1992). Liu J.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Goshima N.,et al.Nat. Methods 5:1011-1017(2008).