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CALR / Calreticulin Antibody (clone 1G6A7)

Mouse Monoclonal Antibody
Catalog # ALS12839

Specification

CALR / Calreticulin Antibody (clone 1G6A7) - Product Information

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

CALR / Calreticulin Antibody (clone 1G6A7) - Additional Information

Gene ID 811

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

Target/Specificity
Synthetic peptide corresponding to aa (EEEDVPGQAKDELC)of human Calreticulin

Reconstitution & Storage
+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions
CALR / Calreticulin Antibody (clone 1G6A7) is for research use only and not for use in diagnostic or therapeutic procedures.

CALR / Calreticulin Antibody (clone 1G6A7) - 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:7876246). Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export (PubMed:11149926). 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}

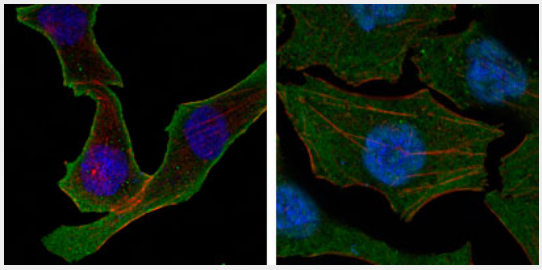
Volume
50 µl

CALR / Calreticulin Antibody (clone 1G6A7) - Protocols

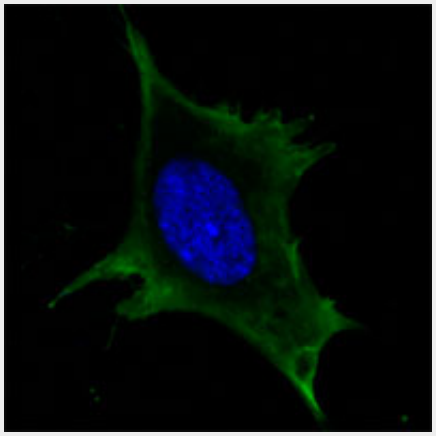
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CALR / Calreticulin Antibody (clone 1G6A7) - Images



Confocal immunofluorescence of SKBR-3 (left) and A549 (right) cells using Calreticulin mouse...



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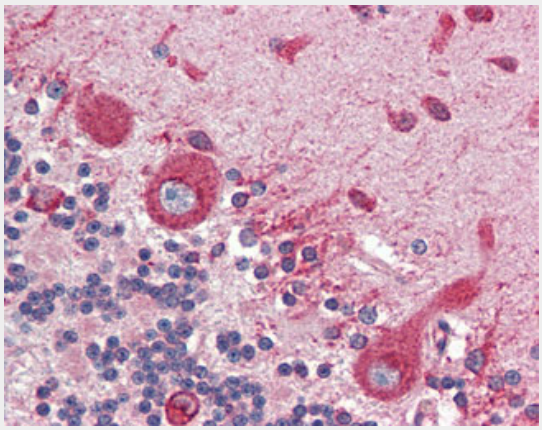
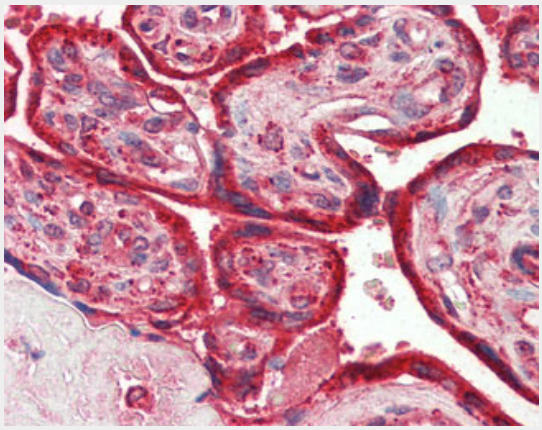
Confocal immunofluorescence of 3T3-L1 cells using Calreticulin mouse monoclonal antibody(green).



Anti-Calreticulin antibody IHC of human brain, cerebellum.



Anti-Calreticulin antibody IHC of human placenta.

CALR / Calreticulin Antibody (clone 1G6A7) - 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 1G6A7) - 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).