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CALR Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50055

Specification

CALR Antibody - Product Information

Application	**IF, WB, IHC**
Primary Accession	P27797
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**48 KDa**
Antigen Region	**49-78**

CALR Antibody - Additional Information

Gene ID 811

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

Dilution
IF~~1:100
WB~~ 1:1000
IHC~~1:50-1:100

Format
Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions
-20℃

CALR Antibody - 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).

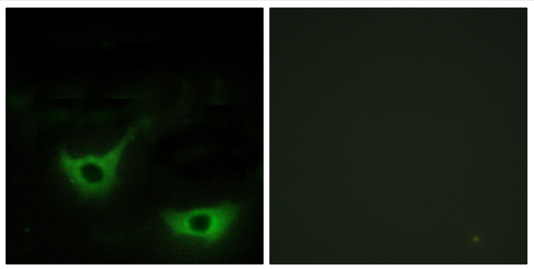
Cellular Location
Endoplasmic reticulum lumen. Cytoplasm, cytosol. Secreted, extracellular space, extracellular matrix. Cell surface. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P28491}. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:Q8K3H7}. Cytolytic granule.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

CALR Antibody - 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 Antibody - Images



Immunofluorescence analysis of NIH/3T3 cells, using CALR antibody.

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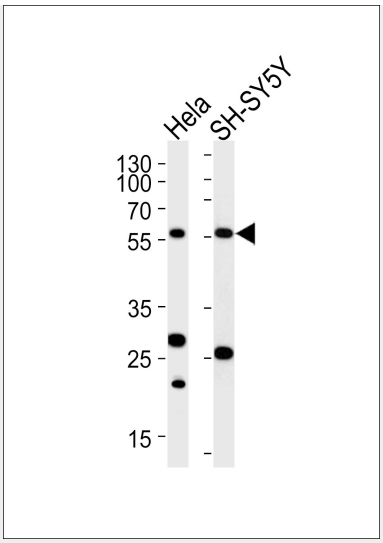
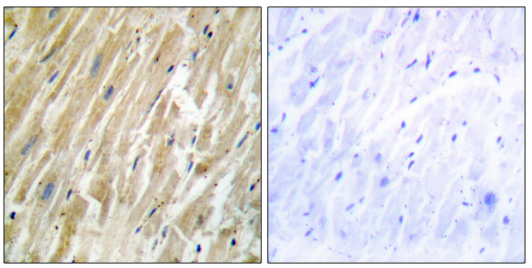


Western blot analysis of lysates from Hela,SH-SY5Y cell line (from left to right),using CALR Antibody(C10495). C10495 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Immunohistochemistry analysis of paraffin-embedded human heart tissue using CALR antibody.

CALR Antibody - 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 Antibody - 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).

CALR Antibody - Citations

- The Individual Effects of Cyclin-Dependent Kinase Inhibitors on Head and Neck Cancer Cells-A Systematic Analysis