

Calreticulin Antibody

Rabbit mAb Catalog # AP90392

Product Information

Application WB, IHC, IF, FC, ICC, IP, IHF

Primary Accession <u>P27797</u>

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names CALR; CRT; FLJ26680; RO; SSA; cC1Qr; CRP55; CRTC; HACBP;

IsotypeRabbit IgGHostRabbitCalculated MW48142

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human Calreticulin - ER Marker

Description Calcium is a universal signaling molecule involved in many cellular functions

such as cell motility, metabolism, protein modification, protein folding and apoptosis. Calcium is stored in the endoplasmic reticulum (ER), where it is buffered by calcium binding chaperones such as calnexin and calreticulin, and

is released via the IP3 Receptor.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

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

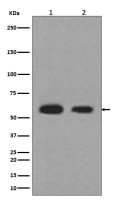
(PubMed:<u>11149926</u>). Involved in maternal gene expression regulation. May participate in oocyte maturation via the regulation of calcium homeostasis (By similarity). Present in the cortical granules of non-activated oocytes, is

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}

Images



Western blot analysis of Calreticulin expression in (1)HeLa cell lysate; (2)HepG2 cell lysate.

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