

Calreticulin Antibody (Clone S75)
Mouse Monoclonal Antibody
Catalog # ABV10057**Specification**

Calreticulin Antibody (Clone S75) - Product Information

Application	WB, IHC
Primary Accession	P27797
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	48142

Calreticulin Antibody (Clone S75) - Additional Information**Gene ID 811**

Application & Usage	Western blot analysis (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Other applications have not been tested.
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Other Names

CRP55, CRTC, CALR, Calregulin, cC1qR, ERp60, HACBP, RO, SSA,

Target/Specificity

Calreticulin

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (200 µg/ml) protein A purified antibody in PBS containing 30% glycerol, 0.5 mg/ml BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Calreticulin Antibody (Clone S75) is for research use only and not for use in diagnostic or therapeutic procedures.

Calreticulin Antibody (Clone S75) - 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}

Calreticulin Antibody (Clone S75) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Calreticulin Antibody (Clone S75) - Images

Calreticulin Antibody (Clone S75) - Background

Calreticulin is a calcium binding protein found in abundance in the endoplasmic reticulum and the sarcoplasmic reticulum. Like many other ER proteins, it has the conserved ER retention KDEL (Lys-Asp-Glu-Leu) sequence at its C-terminus. Calreticulin has also been detected in the nucleus and nuclear envelop. Recent studies suggest that this soluble ER protein has a multifunctional role as it appears to be involved in calcium storage and regulation as well as having a molecular chaperone activity. Studies also suggest its involvement in certain autoimmune diseases. Consistence with its multiple functions the calreticulin molecule appears to have a zonal character.

The protein has both high and low affinity calcium binding sites.