

Anti-Calreticulin Antibody

Rabbit polyclonal antibody to Calreticulin

Catalog # AP59977

Product Information

Application	WB, IF/IC, IHC
Primary Accession	P27797
Other Accession	P14211
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48142

Additional Information

Gene ID	811
Other Names	CRTC; Calreticulin; CRP55; Calregulin; Endoplasmic reticulum resident protein 60; Erp60; HACBP; grp60
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Calreticulin. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

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).

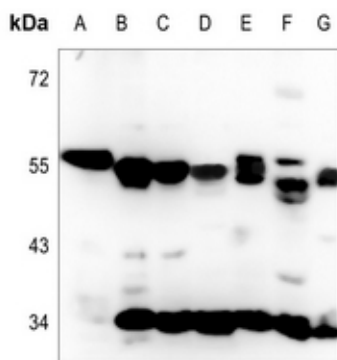
Cellular Location

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}

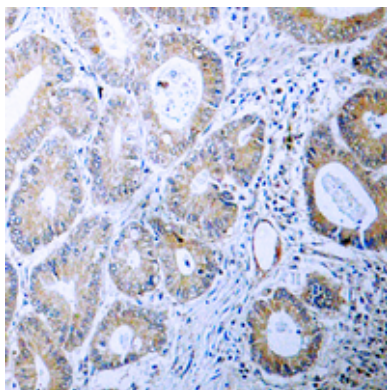
Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Calreticulin. The exact sequence is proprietary.

Images

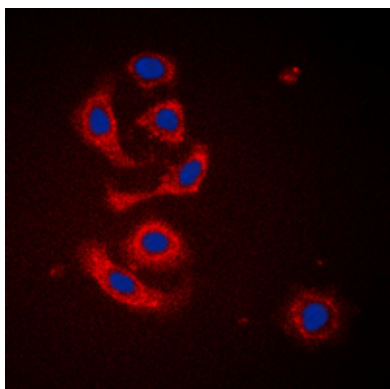


Western blot analysis of Calreticulin expression in HEK293T (A), Hela (B), A549 (C), mouse kidney (D), mouse heart (E), rat kidney (F), rat heart (G) whole cell lysates.



Immunohistochemical analysis of Calreticulin staining in human colon cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of Calreticulin staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



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