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CALR Antibody (Center)

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8720b

Product Information

Application	WB, E
Primary Accession	P27797
Reactivity	Human, Mouse, Rat
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ
Clone Names	2143CT58.2.1
Calculated MW	48142

Additional Information

Gene ID	811
Other Names	Calreticulin, CRP55, Calregulin, Endoplasmic reticulum resident protein 60, ERp60, HACBP, grp60, CALR (HGNC:1455), CRTC
Target/Specificity	This CALR antibody is generated from a mouse immunized with a recombinant protein from human CALR.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CALR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

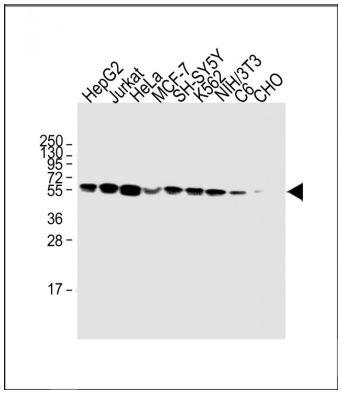
Background

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).

References

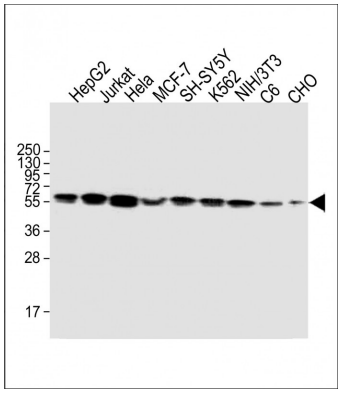
McCauliffe D.P.,et al.J. Clin. Invest. 85:1379-1391(1990).
Rokeach L.A.,et al.J. Immunol. 147:3031-3039(1991).
McCauliffe D.P.,et al.J. Biol. Chem. 267:2557-2562(1992).
Liu J.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Goshima N.,et al.Nat. Methods 5:1011-1017(2008).

Images

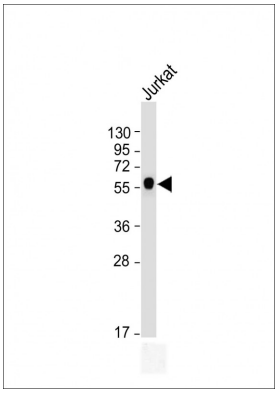


All lanes : Anti-CALR Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: HeLa whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: SH-SY5Y whole cell lysate Lane 6: K562 whole cell lysate Lane 7: NIH/3T3 whole cell lysate Lane 8: C6 whole cell lysate Lane 9: CHO whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-CALR Antibody (Center) at dilution Lane 1:HepG2 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Hela whole cell lysate Lane 4: MCF-7 whole cell



lysate Lane 5: SH-SY5Y whole cell lysate Lane 6: K562 whole cell lysate Lane 7: NIH/3T3 whole cell lysate Lane 8: C6 whole cell lysate Lane 9: CHO whole cell lysat Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-CALR Antibody (Center) at dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.