10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Calreticulin Rabbit Monoclonal Antibody

Catalog # ABO14120

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P27797
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Calreticulin Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	811
Other Names	Calreticulin, CRP55, Calregulin, Endoplasmic reticulum resident protein 60, ERp60, HACBP, grp60, CALR (HGNC:1455), CRTC
Calculated MW	48142
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50 FC 1:50
Subcellular Localization	Endoplasmic reticulum lumen. Cytoplasm, cytosol. Secreted, extracellular space, extracellular matrix. Cell surface. Sarcoplasmic reticulum lumen. Also found in cell surface (T cells), cytosol and extracellular matrix (PubMed:10358038). Associated with the lytic granules in the cytolytic T-lymphocytes..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: CGO-3
Immunogen	A synthesized peptide derived from human Calreticulin - ER Marker
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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}

Images

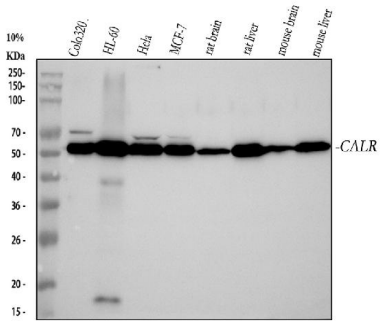
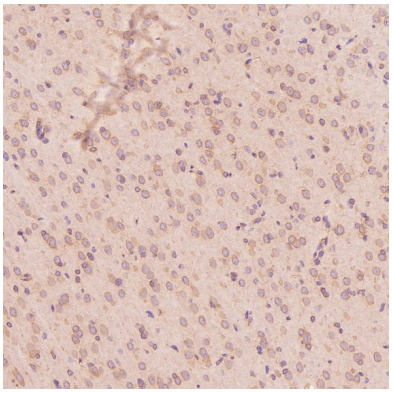
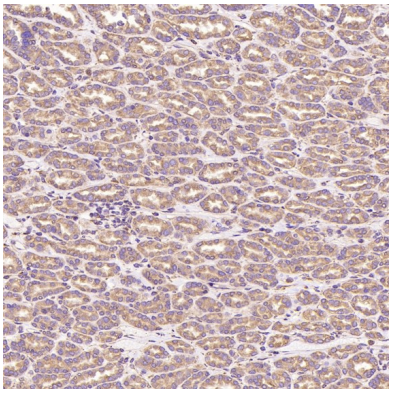


Figure 1. Western blot analysis of Calreticulin using anti-Calreticulin antibody (M00894).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human COLO320 whole cell lysates,
Lane 2: human HL-60 whole cell lysates,
Lane 3: human Hela whole cell lysates,
Lane 4: human MCF-7 whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat liver tissue lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse liver tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Calreticulin antigen affinity purified monoclonal antibody (Catalog # M00894) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced

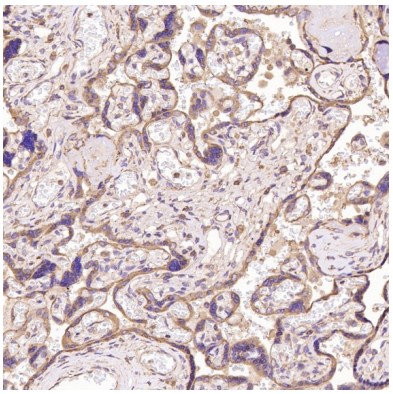
Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Calreticulin at approximately 60 kDa. The expected band size for Calreticulin is at 48 kDa.



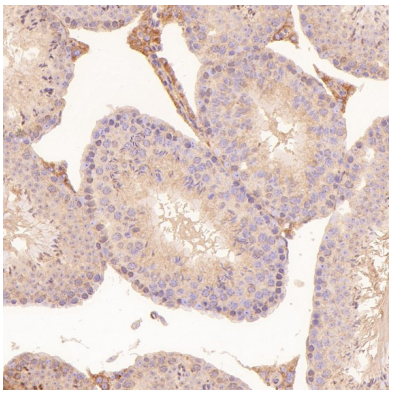
Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex, using the Antibody at 1:150 dilution.



Immunohistochemical analysis of paraffin-embedded Human renal cancer, using the Antibody at 1:150 dilution.

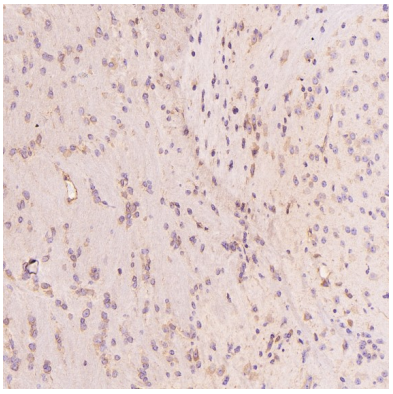


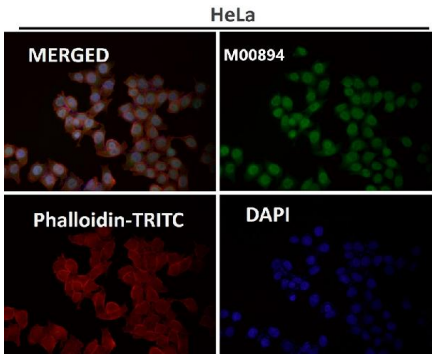
Immunohistochemical analysis of paraffin-embedded Human placenta, using the Antibody at 1:150 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse testis, using the Antibody at 1:150 dilution.

Immunohistochemical analysis of paraffin-embedded Mouse cerebellum, using the Antibody at 1:150 dilution.





Immunofluorescent analysis using the Antibody at 1:50 dilution.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.