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Anti-Calreticulin Rabbit Monoclonal Antibody
Catalog # ABO14120

Specification

Anti-Calreticulin Rabbit Monoclonal Antibody - 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.

Anti-Calreticulin Rabbit Monoclonal Antibody - 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 MW KDa

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..

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.

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.

Anti-Calreticulin Rabbit Monoclonal Antibody - 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}

Anti-Calreticulin Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Calreticulin Rabbit Monoclonal Antibody - Images

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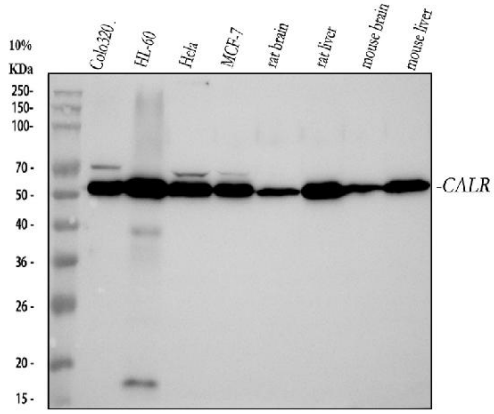
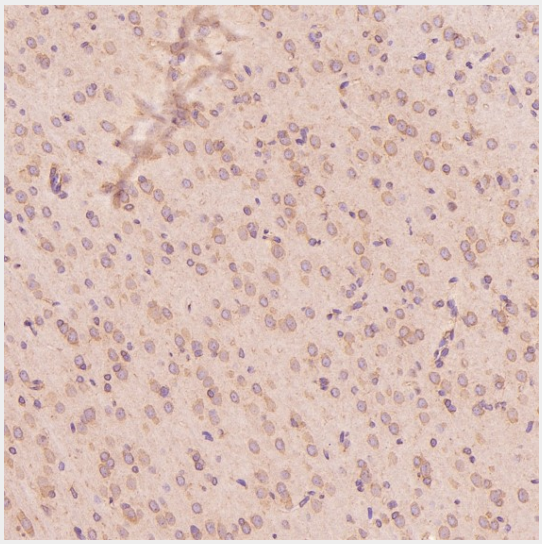


Figure 1. Western blot analysis of Calreticulin using anti-Calreticulin antibody (M00894).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human 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.

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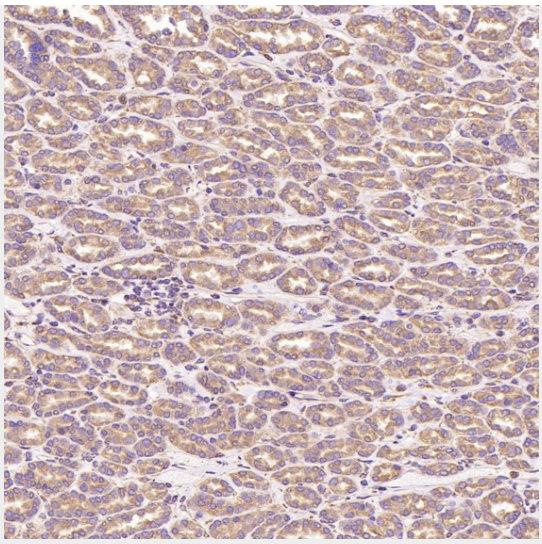
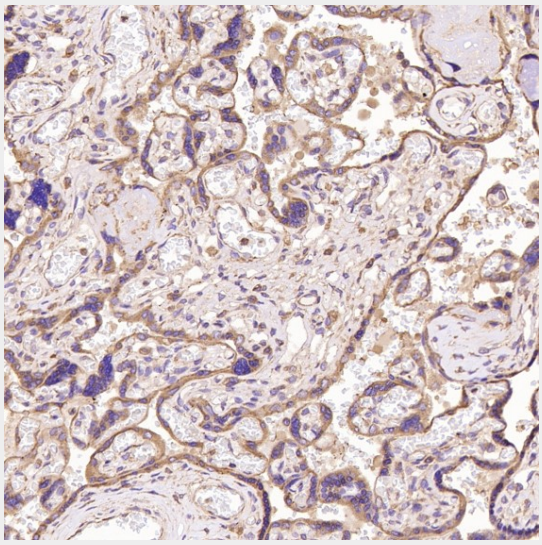
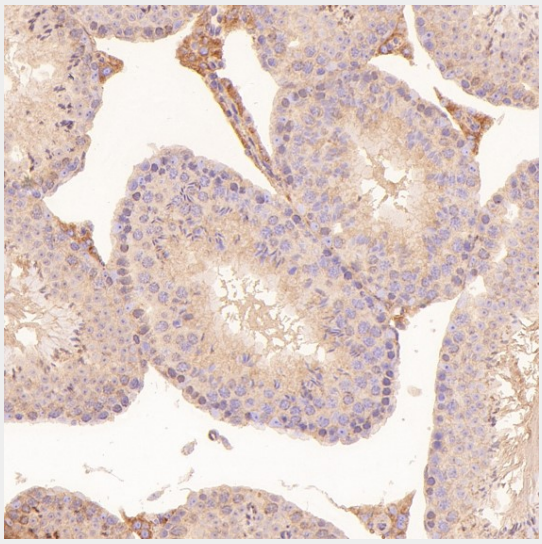


Immunohistochemical analysis of paraffin-embedded Human renal cancer, using the Antibody at 1:150 dilution.



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



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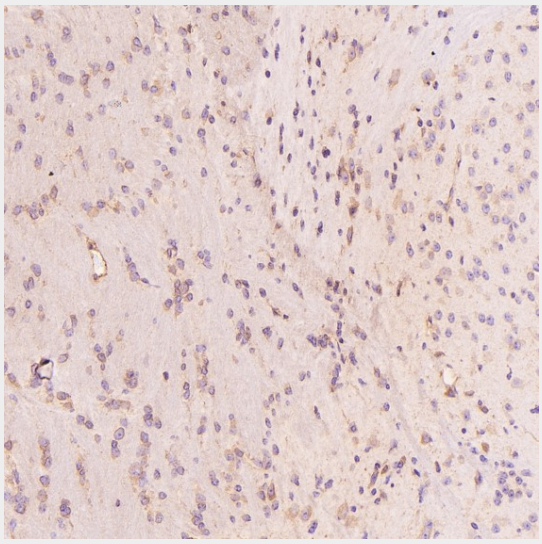
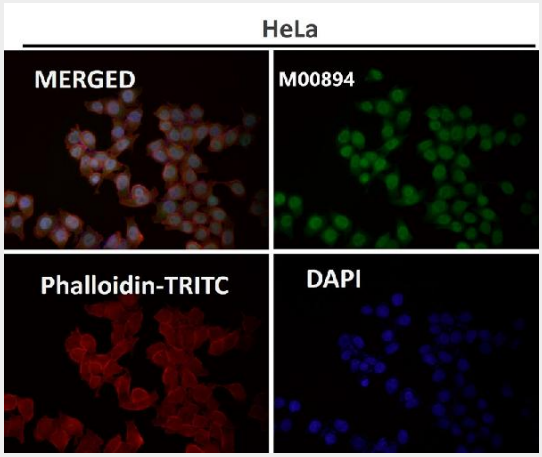
Immunohistochemical analysis of paraffin-embedded Mouse testis, using the Antibody at 1:150 dilution.



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



Immunofluorescent analysis using the Antibody at 1:50 dilution.