OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA336776

Calreticulin (CALR) Mouse Monoclonal Antibody [Clone ID: 1G6A7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1G6A7
Applications:	FC, IF, IHC, WB
Recommend Dilution:	WB: 1:500-1:2000, ELISA: 1:10000, FC: 1 ug per million cells, IF: 1:200-1:1000, IHC: 1:200-1:1000, IHC-P: 1:200-1:1000
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to the C-terminus (EEEDVPGQAKDELC) of human Calreticulin, conjugated to KLH. [UniProt# P27797]
Formulation:	PBS, 0.03% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	1 mg/ml
Purification:	Ammonium sulfate precipitation
Predicted Protein Size:	48 kDa
Gene Name:	calreticulin
Database Link:	NP_004334 Entrez Gene 12317 MouseEntrez Gene 811 Human

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Background: Calreticulin is the major calcium binding protein found in smooth muscle sarcoplasmic reticulum (SR) and non-muscle endoplasmic reticulum (ER) membranes. This protein was originally identified in SR membranes and plays a minor role in calcium storage in skeletal and cardiac muscle SR. Calreticulin is also known as calregulin, CRP55, CaBP3, calsequestrin-like protein and Ro/SS-A antigen. Calreticulin binds calcium with low affinity and high capacity, however, it also exhibits a single high affinity binding site. The highly conserved sequence Lys-Asp-Glu-Leu (KDEL) is present at the C-terminus of calreticulin and other resident ER proteins including glucose regulated protein 78 (GRP78), GRP94 and protein disulfide isomerase (PDI). This sequence is responsible for the retention of newly synthesized proteins within the ER lumen. This retention is reported to be mediated by a KDEL receptor. Recent reports indicate that calreticulin can act as a modulator of the regulation of gene transcription by nuclear hormone receptors and may also act as a molecular chaperone.

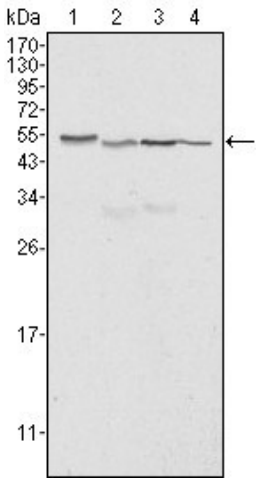
Synonyms: cC1qR; CRT; HEL-S-99n; RO; SSA

Note: This Calreticulin (1G6A7) antibody is useful in Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and ELISA.

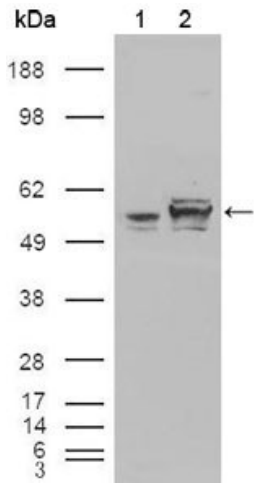
Protein Families: Druggable Genome, Secreted Protein, Transcription Factors

Protein Pathways: Antigen processing and presentation

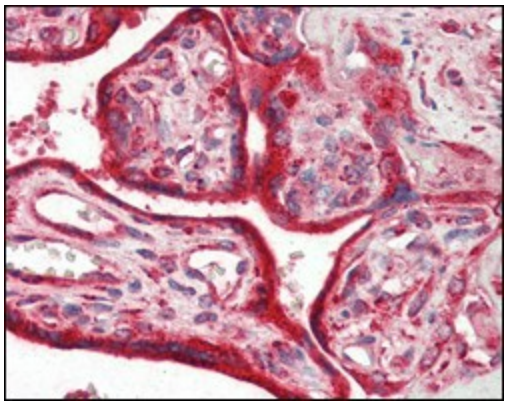
Product images:



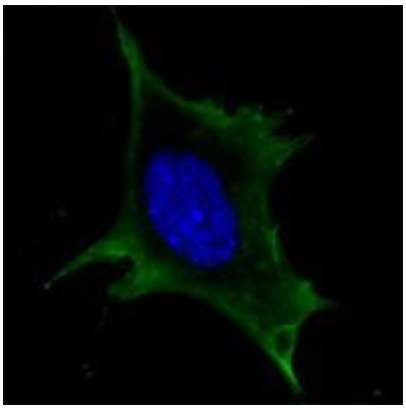
Western Blot: Calreticulin Antibody (1G6A7) TA336776 - Western blot analysis using anti-Calreticulin mAb against Hela (1), A549 (2), NTERA2 (3) and MCF-7 (4) cell lysate.



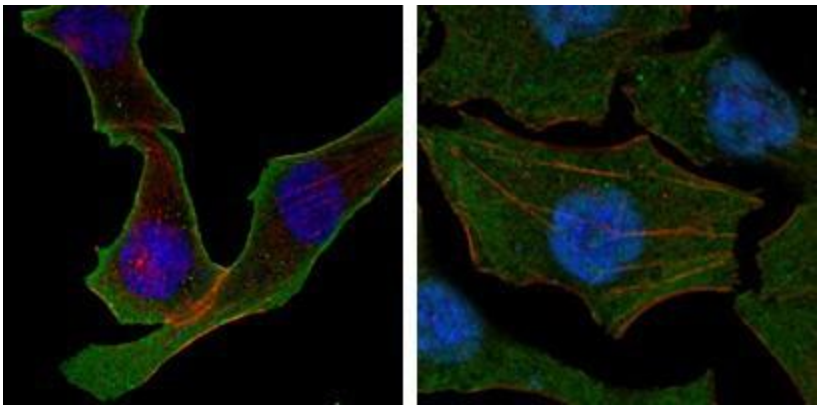
Western Blot: Calreticulin Antibody (1G6A7) TA336776 - Western blot analysis using Calreticulin mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY Calreticulin cDNA (2).



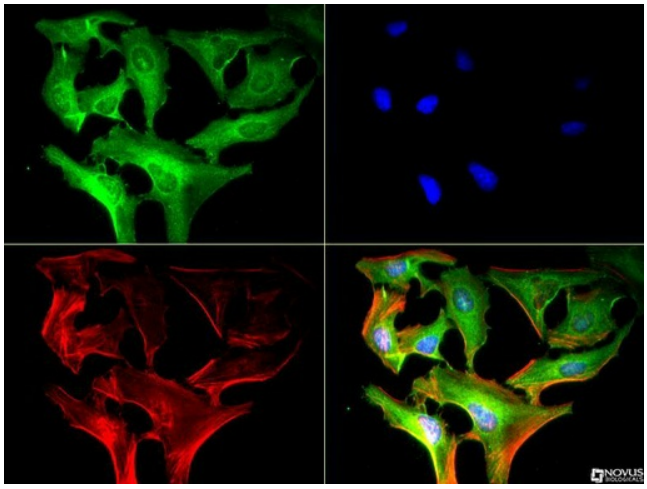
Immunohistochemistry-Paraffin: Calreticulin Antibody (1G6A7) TA336776 - Immunohistochemical analysis of paraffin-embedded human placenta tissues using anti-Calreticulin mAb.



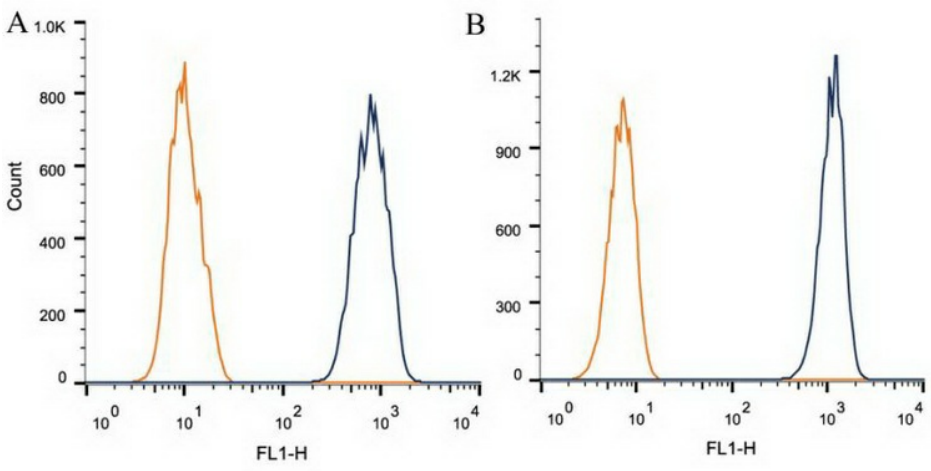
Immunocytochemistry/Immunofluorescence: Calreticulin Antibody (1G6A7) TA336776 - Confocal immunofluorescence analysis of 3T3-L1 cells using anti-Calreticulin mAb (green). Blue: DRAQ5 fluorescent DNA dye.



Immunocytochemistry/Immunofluorescence: Calreticulin Antibody (1G6A7) TA336776 - Confocal immunofluorescence analysis of SKBR-3 (left) and A549 (right) cells using anti-Calreticulin mAb (green). Red: Actin filaments have been labeled with DY-554 phalloi



Immunocytochemistry/Immunofluorescence: Calreticulin Antibody (1G6A7) TA336776 - The Calreticulin antibody was tested in HeLa cells at a 1:250 dilution against Dylight 488 (Green). Actin was counterstained against Phalloidin 568 (Red) and cells were mou



Flow Cytometry: Calreticulin Antibody (1G6A7) TA336776 - Intracellular flow cytometric staining of 1 x 10^6 CHO (A) and HEK-293 (B) cells using Calreticulin antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6