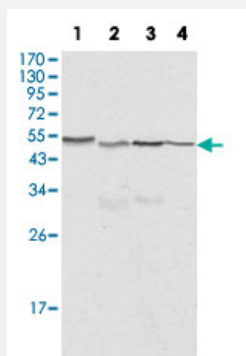


CALR monoclonal antibody, clone 1G6A7

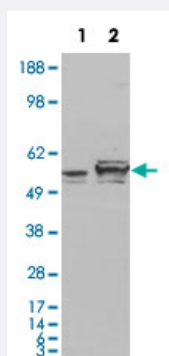
Catalog # MAB10459 Size 100 uL

Applications



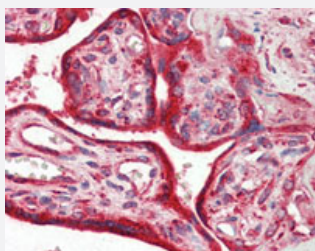
Western Blot (Cell lysate)

Western blot analysis of CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) against HeLa (1), A-549 (2), NTERA2 (3) and MCF-7 (4) cell lysate.



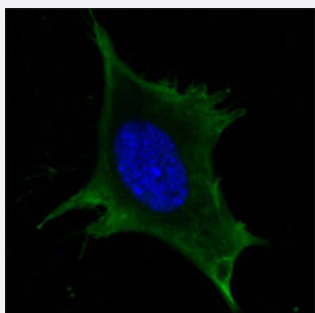
Western Blot (Transfected lysate)

Western blot analysis using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY CALR cDNA (2).



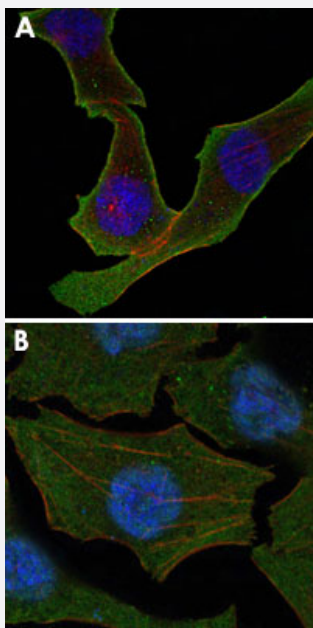
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human placenta tissue using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459).



Immunofluorescence

Confocal immunofluorescence analysis of 3T3-L1 cells using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) (green). Blue: DRAQ5 fluorescent DNA dye.



Immunofluorescence

Confocal immunofluorescence analysis of SK-BR-3 (A) and A-549 (B) cells using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

Specification

Product Description	Mouse monoclonal antibody raised against synthetic peptide CALR.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to human Calreticulin.
Sequence	EEEDVPGQAKDELC
Host	Mouse
Theoretical MW (kDa)	48
Reactivity	Human, Mouse
Form	Liquid
Isotype	IgG2a
Recommend Usage	Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Immunofluorescence (1:200-1:1000) ELISA (1:10000) The optimal working dilution should be determined by the end user.
Storage Buffer	In ascitic (0.03% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) against HeLa (1), A-549 (2), NTERA2 (3) and MCF-7 (4) cell lysate.

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Western blot analysis using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY CALR cDNA (2).

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- Immunofluorescence

Confocal immunofluorescence analysis of SK-BR-3 (A) and A-549 (B) cells using CALR monoclonal antibody, clone 1G6A7 (Cat # MAB10459) (green).

Red: Actin filaments have been labeled with DY-554 phalloidin.

Blue: DRAQ5 fluorescent DNA dye.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CALR

Entrez GeneID	811
Gene Name	CALR
Gene Alias	CRT, FLJ26680, RO, SSA, cC1qR
Gene Description	calreticulin
Omim ID	109091
Gene Ontology	Hyperlink

Gene Summary

Calreticulin is a multifunctional protein that acts as a major Ca^{2+} -binding (storage) protein in the lumen of the endoplasmic reticulum. It is also found in the nucleus, suggesting that it may have a role in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almost identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear receptors. Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients which contain anti-Ro/SSA antibodies, it is highly conserved among species, and it is located in the endoplasmic and sarcoplasmic reticulum where it may bind calcium. The amino terminus of calreticulin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. Calreticulin can inhibit the binding of androgen receptor to its hormone-responsive DNA element and can inhibit androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Thus, calreticulin can act as an important modulator of the regulation of gene transcription by nuclear hormone receptors. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin but calreticulin is not a Ro/SS-A antigen. Earlier papers referred to calreticulin as an Ro/SS-A antigen but this was later disproven. Increased autoantibody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes. [provided by RefSeq]

Other Designations

Sicca syndrome antigen A (autoantigen Ro; calreticulin)|autoantigen Ro

Pathway

- [Antigen processing and presentation](#)

Disease

- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)