Datasheet for ABIN1724687

anti-Calreticulin antibody

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Overview

Quantity:	100 µL
Target:	Calreticulin (CALR)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Calreticulin antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunocytochemistry (ICC)

Product Details

Purpose:	Calreticulin Antibody
Immunogen:	Synthetic peptide corresponding to aa (EEEDVPGQAKDELC) of human Calreticulin, conjugated to KLH.
Sequence:	EEEDVPGQAK DELC
Clone:	1G6A7
Isotype:	IgG2a
Purification:	Ascitic fluid

Target Details

Target:	Calreticulin (CALR)
Alternative Name:	Calreticulin (CALR Products)

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Target Details

Background:	Description: Calreticulin, also known as RO, CRT, SSA, cC1qR, FLJ26680, CALR. Entrez Protein NP_004334. It 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. Aliases: RO, CRT, SSA, cC1qR, FLJ26680, CALR
Molecular Weight:	48kDa
Gene ID:	811
NCBI Accession:	NP_004334
HGNC:	811
UniProt:	P27797
Pathways:	Retinoic Acid Receptor Signaling Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Nuclear Hormone Receptor Binding, ER-Nucleus Signaling, Unfolded Protein Response

Application Details

Application Notes:	ELISA: 1/10000 ICC: 1/200 - 1/1000
Restrictions:	For Research Use only

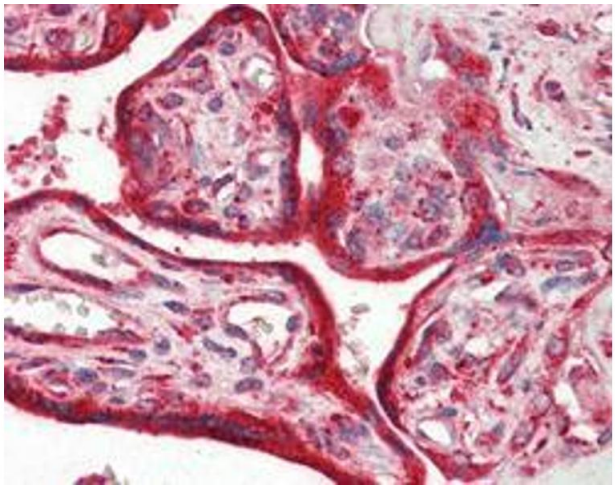
Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Publications

Product cited in:	Tan, Chen, Li, Mabuchi, Bouvier: "The calcium- and zinc-responsive regions of calreticulin reside strictly in the N-/C-domain." in: **Biochimica et biophysica acta**, Vol. 1760, Issue 5, pp. 745-53, (2006) (PubMed).

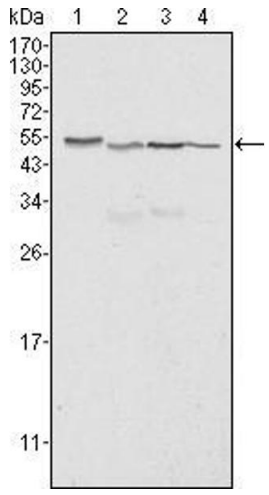
Images



Immunohistochemistry

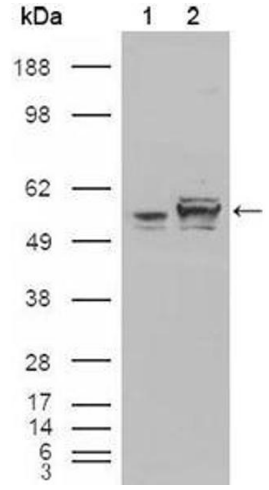
Image 1. Immunohistochemical analysis of paraffin-embedded human placenta tissues using Calreticulin mouse mAb.

Images



Western Blotting

Image 2. Western blot analysis using Calreticulin mouse mAb against Hela (1), A549 (2), NTERA2 (3) and MCF-7 (4) cell lysate.



Western Blotting

Image 3. Western blot analysis using Calreticulin mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY Calreticulin cDNA (2).

Please check the product details page for more images. Overall 5 images are available for ABIN1724687.