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CALR Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant CALR.
Catalog # AT1373a

Product Information

Application	WB, IHC
Primary Accession	P27797
Other Accession	BC020493
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1G11-1A9
Calculated MW	48142

Additional Information

Gene ID	811
Other Names	Calreticulin, CRP55, Calregulin, Endoplasmic reticulum resident protein 60, ERp60, HACBP, grp60, CALR, CRTC
Target/Specificity	CALR (AAH02500.1, 1 a.a. ~ 417 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CALR Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

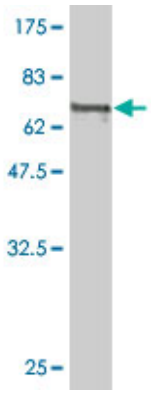
Calreticulin is a multifunctional protein that acts as a major Ca(2+)-binding (storage) protein in the lumen of the endoplasmic reticulum. It is also found in the nucleus, suggesting that it may have a role in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almost 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.

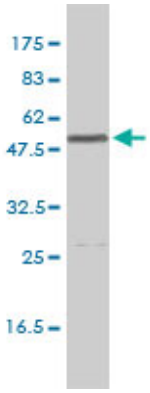
References

1.The angiogenesis inhibitor vasostatin is regulated by neutrophil elastase dependent cleavage of calreticulin in AML patients.Mans S, Banz Y, Mueller BU, Pabst T.Blood. 2012 Aug 22.

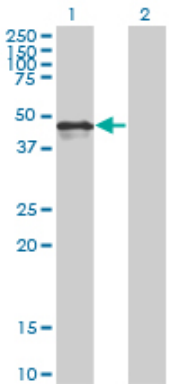
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (71.61 KDa) .



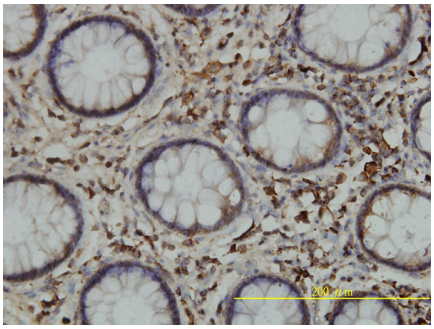
CALR monoclonal antibody (M01), clone 1G11-1A9
Western Blot analysis of CALR expression in K-562 ((Cat # AT1373a)



Western Blot analysis of CALR expression in transfected 293T cell line by CALR monoclonal antibody (M01), clone 1G11-1A9.

Lane 1: CALR transfected lysate(48 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to CALR on formalin-fixed paraffin-embedded human colon tissue. [antibody concentration 1 ug/ml]



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