



Category: Polyclonal Antibody
Product Name: Rabbit Polyclonal Antibody to Calreticulin

Catalog Number: PAB-606020177

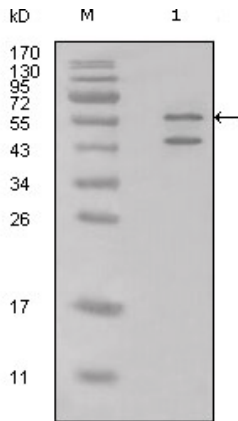


Figure 1: Western blot analysis using anti-Calreticulin polyclonal antibody against Hela cell lysate.

Lot#:
Clone#:
Host and isotype: Rabbit IgG2a
Size: 0.1ml
MW:
Aliases: RO; CRT; SSA; cC1qR;
FLJ26680; CALR
Entrez Gene: 811
Species reactivity: Human

Description

Calreticulin is a multifunctional protein that acts as a major Ca²⁺-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.

Immunogen

Synthetic peptide corresponding to aa(E-E-E-D-V-P-G-Q-A-K-D-E-L-C) of human Calreticulin, conjugated to KLH.

Application

Immunofluorescence: 1/200 - 1/1000.

ELISA: Propose dilution 1/10000.

Not yet tested in other applications.

Determining optimal working dilutions by titration test.

Formulation

Rabbit anti-serum.

Storage

Store at 4°C, for long term storage, store at -20°C.

Related product

References

1. J Biol Chem. 2006 May 5;281(18):12841-8. Epub 2006 Mar 9.
2. Biochim Biophys Acta. 2006 May;1760(5):745-53. Epub 2006 Feb 28.
3. Oncol Rep. 2007 May;17(5):1101-7.

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