
Product Name: CALR Mouse Monoclonal Antibody**Catalog #: AMM82376**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA,FC
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	48.1kDa

Antigen Information

Gene Name	CALR
Alternative Names	RO; CRT; SSA; cC1qR; HEL-S-99n
Gene ID	811.0
SwissProt ID	P27797
Immunogen	Purified recombinant fragment of human CALR (AA: 18-417) expressed in E. Coli.

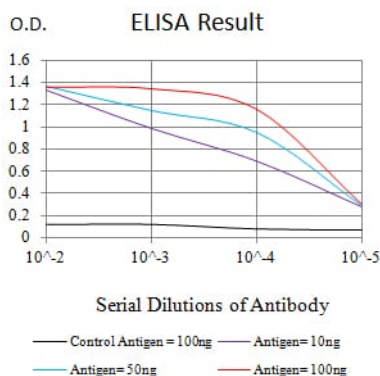
Background

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

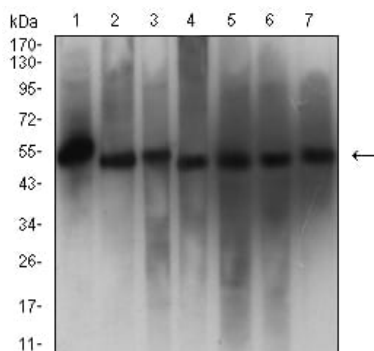
of nuclear receptors. Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients which contain anti-Ro/SSA antibodies, it is highly conserved among species, and it is located in the endoplasmic and sarcoplasmic reticulum where it may bind calcium. The amino terminus of calreticulin 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.

Research Area

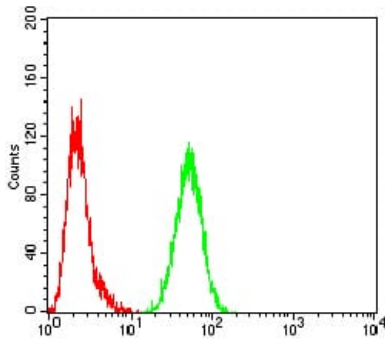
Image Data



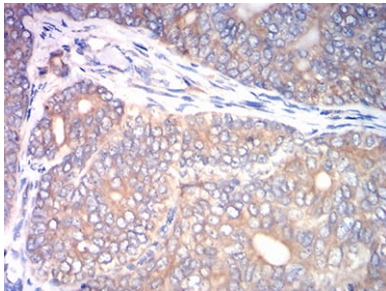
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



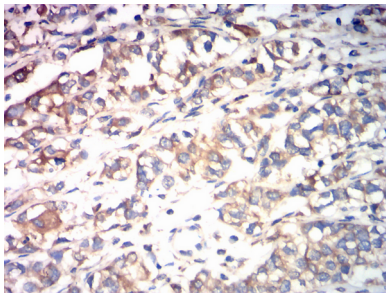
Western blot analysis using CALR mouse mAb against Hela (1), MCF-7 (2), NIH/3T3 (3), HepG2 (4), Jurkat (5), Y-79 (6), and C6 (7) cell lysate.



Flow cytometric analysis of HeLa cells using CALR mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using CALR mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human bladder cancer tissues using CALR mouse mAb with DAB staining.