Product Name: Calreticulin Rabbit Monoclonal Antibody
Catalog #: AMRe86458

Summary

Production Name	Calreticulin Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal antibody
Host	Rabbit
Application	WB, IHC-P, ICC/IF, FC
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% protective protein. Stable for 12 months from date of receipt.
Purification	Affinity Purification

Immunogen

Gene Name	Calreticulin
Alternative Names	RO; CRT; SSA; cC1qR; HEL-S-99n
Gene ID	811
SwissProt ID	P27797.

Application

Dilution Ratio	WB: 1:1000-1:5000 IHC-P: 1:200-1:500 ICC/IF: 1:200-1:500 FC: 1:10-1:100
Molecular Weight	Calculated MW:48 kDa; Observed MW:55 kDa

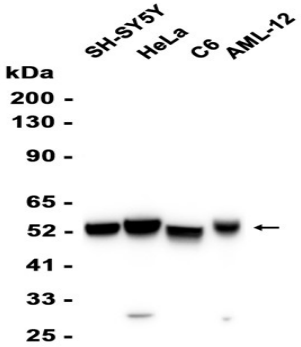
Background

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. [provided by RefSeq, Jul 2008]

Research Area

Image Data



Western blot analysis of extracts from SH-SY5Y，HeLa，C6，AML-12 cells using AMRe86458 at 1:500.

Note

For research use only.