

Datasheet

CALR monoclonal antibody (M01), clone 1G11-1A9

Catalog Number: H00000811-M01

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a full length recombinant CALR.

Clone Name: 1G11-1A9

Immunogen: 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.

Sequence:

MLLSVPLLLGLLGLAVAEPVYFKEQFLDGDGWTSRW
IESKHKSDFGKFLVSSGKFGDEEKDKGLQTSQDARF
YALSASFEPFSNKGQTLVVQFTVKHEQNIDCGGGYVK
LFPNSLDQTDHMGDSEYNIMFGPDICGPGTKKVHVIFN
YKGNVLINKDIRCKDDEFTHLYTLIVRPDNTYEVKIDN
SQVESGSLEDDWDFLPPKKIKDPDASKPEDWDERAKI
DDPTDSKPEDWDKPEHIPDPDAKKPEDWDEEMDGE
WEPPVIQNPEYKGEWKPRQIDNPDYKGTWIIHPEIDNP
EYSPDPSIYAYDNFVGLGLDLWQVKSQTIFDNFLITND
EAYAEFNETWGVTKAAEKQMKDKQDEEQRKKEE
EDKKRKEEEEAEDKEDDEDKDEDEEDEDKEEDEEE
DVPGQAKDEL

Host: Mouse

Reactivity: Human

Applications: ELISA, IHC-P, S-ELISA, WB-Ce, WB-Re, WB-Tr

(See our web site product page for detailed applications information)

Protocols: See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Isotype: IgG1 kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 811

Gene Symbol: CALR

Gene Alias: CRT, FLJ26680, RO, SSA, cC1qR

Gene Summary: 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]

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.