

Calreticulin (CALR) Antibody

Catalogue No.:abx033050



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.

Target: Calreticulin (CALR)

Clonality:

Polyclonal

v1.0.0

Datasheet Version: 5.0.0 Revision date: 21 Jul 2025



Reactivity:	Human, Rat
Tested Applications:	ELISA, WB, IHC, FCM
Host:	Rabbit
Recommended dilutions	WB: 1/1000, IHC-P: 1/50 - 1/100, FCM: 1/25. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	KLH-conjugated synthetic peptide between 277-305 amino acids from the Central region of human CALR.
lsotype:	lgG
Form:	Liquid
Purification:	Purified through a protein A column, followed by peptide affinity purification.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P27797 (<u>UniProt</u> , <u>ExPASy</u>)
Gene Symbol:	CALR
NCBI Accession:	NP_004334.1
KEGG:	hsa:811
String:	<u>9606.ENSP00000320866</u>
Molecular Weight:	Calculated MW: 48.1 kDa
Buffer:	PBS containing 0.09% sodium azide.
Specificity:	Predicted to react with Monkey CALR.
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.