

Product datasheet for **TA344447**

Calreticulin (CALR) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-CALR antibody: synthetic peptide directed towards the middle region of human CALR. Synthetic peptide located within the following region: PDPSIYAYDNFGVLGLDLWQVKSQTIFDNFLITNDEAYAEFNETWGV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	46 kDa
Gene Name:	calreticulin
Database Link:	NP_004334 Entrez Gene 811 Human P27797



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Background:

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.

Synonyms:

cC1qR; CRT; HEL-S-99n; RO; SSA

Note:

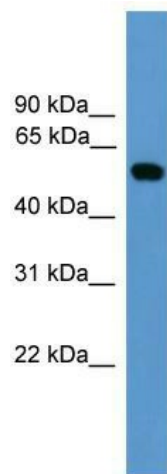
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Mouse: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%

Protein Families:

Druggable Genome, Secreted Protein, Transcription Factors

Protein Pathways:

Antigen processing and presentation

Product images:

WB Suggested Anti-CALR Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:312500; Positive Control: HepG2 cell lysate. CALR is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells