

Product datasheet for **AP33519PU-N**

Calreticulin (CALR) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FC, IHC, WB
Recommended Dilution:	Western blot: 1/100-1/500. ELISA: 1/1,000. Flow Cytometry: 1/10-1/50. Immunohistochemistry on Paraffin Sections: 1/10-1/50.
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	This CALR Antibody is generated from rabbits immunized with a recombinant protein of human CALR.
Specificity:	This antibody detects Calreticulin.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Aff - Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein A column, followed by peptide affinity purification
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	calreticulin
Database Link:	Entrez Gene 64202 Rat Entrez Gene 811 Human P27797



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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.

Synonyms:

CRP55, Calregulin, HACBP, ERp60, grp60, CALR, CRTC

Note:

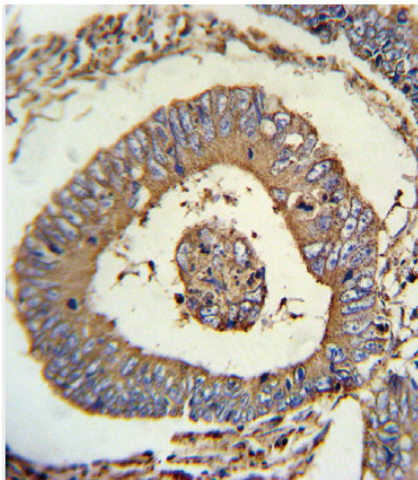
Molecular weight: 48142 Da

Protein Families:

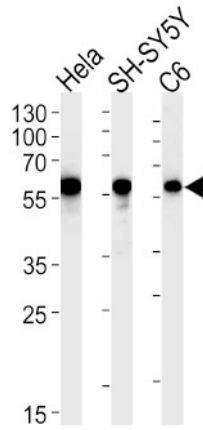
Druggable Genome, Secreted Protein, Transcription Factors

Protein Pathways:

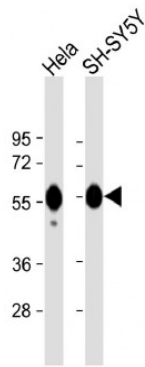
Antigen processing and presentation

Product images:

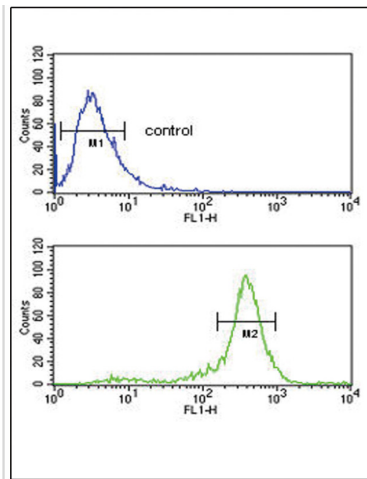
CALR Antibody (Cat.-No AP33519PU-N) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CALR Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



CALR Antibody (Cat.-No AP33519PU-N) western blot analysis in HeLa,SH-SY5Y, rat C6 cell line lysates (35ug/lane). This demonstrates the CALR antibody detected the CALR protein (arrow). antibody detected the CALR protein (arrow).



All lanes: Anti-CALR Antibody at 1:1000 dilution.
 Lane 1: HeLa whole cell lysate.
 Lane 2: SH-SY5Y whole cell lysate
 Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Blocking/Dilution buffer: 5% NFDM/TBST.



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