

## Calregulin Polyclonal Antibody

### Description

Product type	Primary Antibody
Code	POLY-AP01136
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human CALR. AA range:21-70
Mol wt	48142
Species reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Recommended application	WB, IHC-p, IF, ELISA
Concentration	1 mg/ml
Full name	Calregulin Antibody
Synonyms	CALR; CRTG; Calreticulin; CRP55; Calregulin; Endoplasmic reticulum resident protein 60; ERp60; HACBP; grp60

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

### Background

Calreticulin is a multifunctional protein that acts as a major Ca<sup>2+</sup>-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.

### Recommended Dilution

WB: 1: 500 - 1: 2000

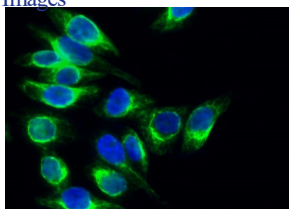
IHC: 1: 100 - 1: 300

IF: 1: 200 - 1: 1000

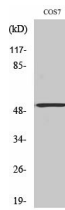
ELISA: 1: 40000

Not yet tested in other applications.

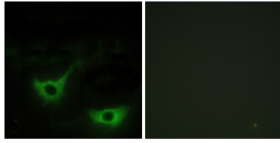
### Images



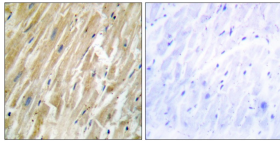
Immunofluorescence analysis of HeLa cell. 1, Calregulin Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



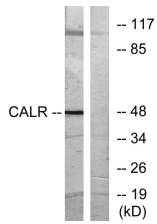
Western Blot analysis of various cells using Calregulin Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using CALR Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using CALR Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS7 cells, using CALR Antibody. The lane on the right is blocked with the synthesized peptide.

### Storage

-20°C for one year

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