

Product datasheet for **AP05311PU-N**

Calreticulin (CALR) Sheep Polyclonal Antibody

Product data:

| | |
|-----------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | IF, IHC, IP, WB |
| Recommended Dilution: | Western blot (1/1,000-1/5,000). Immunoprecipitation. Immunofluorescence (1/50). Immunohistochemistry: Successful use in Paraffin Sections was reported by some researchers. <i>Positive Control:</i> MDCK cells, MCF-7 cells. |
| Reactivity: | Canine, Human, Mouse, Rat |
| Host: | Sheep |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | Recombinant protein derived from the C-terminus of the Calreticulin protein fused to GST. |
| Specificity: | This antibody detects Calreticulin. |
| Formulation: | Phosphate buffered saline with 0.08% Sodium Azide State: Purified State: Liquid purified (0.2 µm sterile filtered) Ig fraction |
| Concentration: | lot specific |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: One year from despatch. |
| Gene Name: | calreticulin |
| Database Link: | Entrez Gene 811 Human P27797 |



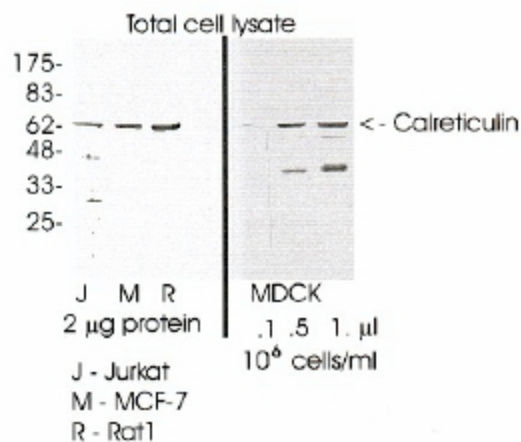
[View online »](#)

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

Product images:


Western Blot using antibody at 1/5,000 dilution on indicated samples.



Immunofluorescence of MCF-7 cells stained with antibody at 1/50 dilution.