

# **Product datasheet for AM06211SU-N**

#### OriGene Technologies, Inc.

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# Calreticulin (CALR) Mouse Monoclonal Antibody [Clone ID: 1G6A7]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 1G6A7

**Applications:** ELISA, IF, IHC, WB **Recommended Dilution: ELISA:** 1/10000.

Western Blotting: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000.

Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Synthetic peptide KLH conjugated corresponding to aa (EEEDVPGQAKDELC) of Human

Calreticulin

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% Sodium Azide.

Conjugation: Unconjugated

Storage: Store the antibody 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.

Predicted Protein Size: 48 kDa

Gene Name: calreticulin

Database Link: Entrez Gene 811 Human

P27797





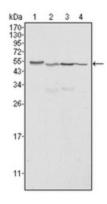
### Background:

Calreticulin, also known as RO, CRT, SSA, cC1qR, FLJ26680, CALR. Entrez Protein NP\_004334. It 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 hormoneresponsive 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:

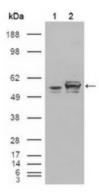
CRP55, Calregulin, HACBP, ERp60, grp60, CALR, CRTC

## **Product images:**

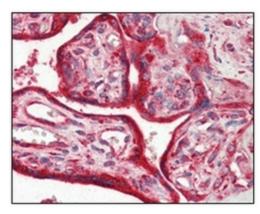


Western blot analysis using Calreticulin antibody Cat.-No AM06211SU-N against Hela (Lane 1), A549 (Lane 2), NTERA2 (Lane 3) and MCF-7 (Lane 4) cell lysate.

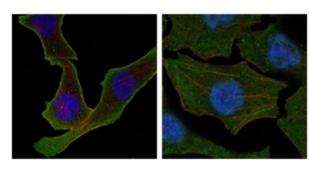




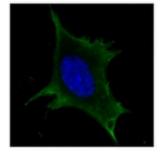
Western blot analysis using Calreticulin antibody Cat.-No AM06211SU-N against HEK293T cells transfected with the pCMV6-ENTRY control (Lane 1) and pCMV6-ENTRY Calreticulin cDNA (Lane 2).



Formalin-Fixed, Paraffin-Embedded Human Placenta stained with CALR antibody Cat.-No AM06211SU-N followed by biotinylated anti-Mouse IgG secondary antibody, Alkaline Phosphatase-Streptavidin and Chromogen.



Confocal immunofluorescence analysis of SKBR-3 (left) and A549 (right) cells using Calreticulin antibody Cat.-No AM06211SU-N (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Confocal immunofluorescence analysis of 3T3-L1 cells using Calreticulin antibody Cat.-No AM06211SU-N (green). Blue: DRAQ5 fluorescent DNA dye.