



Calregulin Polyclonal Antibody

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|---------------------------|---|
| Catalog No | BYab-00685 |
| Isotype | IgG |
| Reactivity | Human;Mouse;Rat;Monkey |
| Applications | WB;Flow Cyt;IHC;IF;ELISA |
| Gene Name | CALR |
| Protein Name | Calreticulin |
| Immunogen | The antiserum was produced against synthesized peptide derived from human CALR. AA range:21-70 |
| Specificity | Calregulin Polyclonal Antibody detects endogenous levels of Calregulin protein. |
| Formulation | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| Source | Polyclonal, Rabbit,IgG |
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Dilution | WB 1:500-2000;Flow Cyt 1:50-200;IHC-p 1:100-500;IF/ICC 1:100-500;ELISA 1:5000-20000 |
| Concentration | 1 mg/ml |
| Purity | ≥90% |
| Storage Stability | -20°C/1 year |
| Synonyms | CALR; CRTC; Calreticulin; CRP55; Calregulin; Endoplasmic reticulum resident protein 60; ERp60; HACBP; grp60 |
| Observed Band | 48kD |
| Cell Pathway | Endoplasmic reticulum lumen . Cytoplasm, cytosol . Secreted, extracellular space, extracellular matrix . Cell surface . Sarcoplasmic reticulum lumen . Cytoplasmic vesicle, secretory vesicle, Cortical granule . Cytolytic granule . Also found in cell surface (T cells), cytosol and extracellular matrix (PubMed:10358038). During oocyte maturation and after parthenogenetic activation accumulates in cortical granules. In pronuclear and early cleaved embryos localizes weakly to cytoplasm around nucleus and more strongly in the region near the cortex (By similarity). In cortical granules of non-activated oocytes, is exocytosed during the cortical reaction in response to oocyte activation (By similarity). . |
| Tissue Specificity | Brain,Cajal-Retzius cell,Colon carcinoma,Eye,Fetal brain cortex,Keratinocyte,Liver,Pancreas |
| Function | caution:Was originally (PubMed:2332496) thought to be the 52 kDa Ro autoantigen.,domain:Associates with PDIA3 through the tip of the extended arm |

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formed by the P-domain.,domain:Can be divided into a N-terminal globular domain, a proline-rich P-domain forming an elongated arm-like structure and a C-terminal acidic domain. The P-domain binds one molecule of calcium with high affinity, whereas the acidic C-domain binds multiple calcium ions with low affinity.,domain:The interaction with glycans occurs through a binding site in the globular lectin domain.,domain:The zinc binding sites are localized to the N-domain.,function:Molecular calcium binding chaperone promoting folding, oligomeric assembly and quality control in the ER via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts

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

matters needing attention

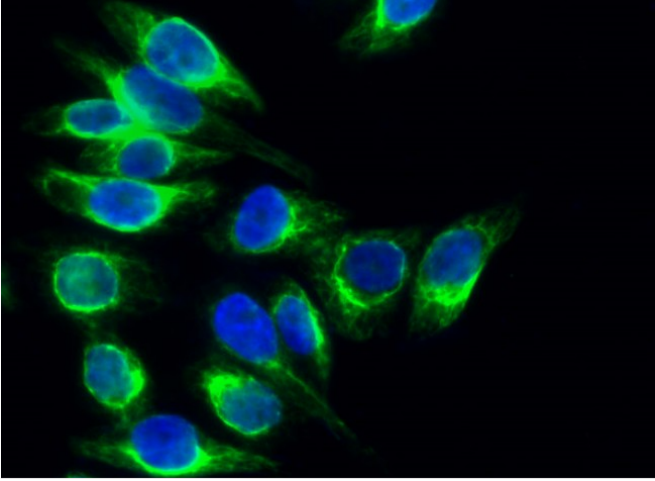
Avoid repeated freezing and thawing!

Usage suggestions

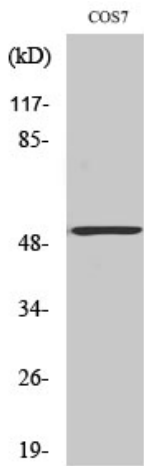
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



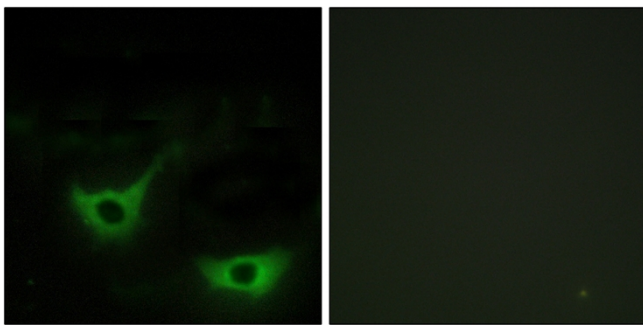
Products Images



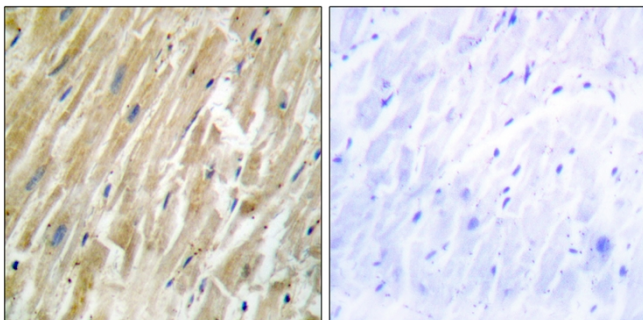
Immunofluorescence analysis of HeLa cell. 1, Calregulin Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). 3 DAPI (blue) 10min.



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.

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