



From Biology to Discovery™

Calreticulin (1G6A) Antibody

Subcategory: Mouse Monoclonal Antibody

Cat. No.: 252751

Unit: 0.1 ml

Description:

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. Increased autoantibody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes.

Isotype: Mouse IgG2a

Applications: WB, IHC, IF

Species Reactivity: H, M

Format: Each vial contains 0.1 ml ascitic fluid with 0.03% sodium azide.

Alternate Names: Calreticulin; CRP55; Calregulin; Endoplasmic reticulum resident protein 60; ERp60; HACBP; grp60; CALR; CRTCRO; CRT; SSA; cC1qR; FLJ26680;

Accession No.: P27797

Antigen: Synthetic peptide corresponding to aa (EEEDVPGQAKDEL) of human Calreticulin, conjugated to KLH.

Application Notes: WB: 1:500-1:2000; IHC: 1:200-1:1000; IF: 1:200-1:1000;

Storage: Store at 4°C for short term use only. Store at -20°C for storage over 1 month. Product is guaranteed 6 months from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.