

Basic Information

Product Name	Anti-Calreticulin/CALR Antibody (Clone#CGO-3)	
Gene Name	CALR	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IP, FCM	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human Calreticulin - ER Marker	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	50-60 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-200 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-200 ImmunoPrecipitation (IP): 1:20 Flow Cytometry (FCM): 1:20	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

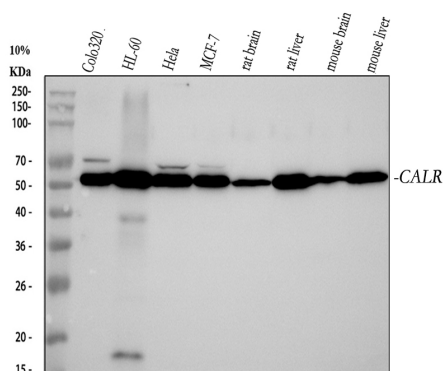
Calreticulin also known as[°]Calregulin,[°]CRP55,[°]CaBP3,[°]Calsequestrin-like protein, and endoplasmic reticulum resident protein 60 (ERp60) is a protein that in humans is encoded by the[°]CALR gene. It is mapped to 19p13.13. Calreticulin is a multifunctional protein that acts as a major Ca(2+)-binding (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.

Reference

Anti-Calreticulin/CALR Antibody (Clone#CGO-3)被引用在3文献中。

Selected Validation Data



Western blot analysis of anti-Calreticulin/CALR antibody (BM4228). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Colo320 whole cell lysates,

Lane 2: human HL-60 whole cell lysates,

Lane 3: human Hela whole cell lysates,

Lane 4: human MCF-7 whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: rat liver tissue lysates,

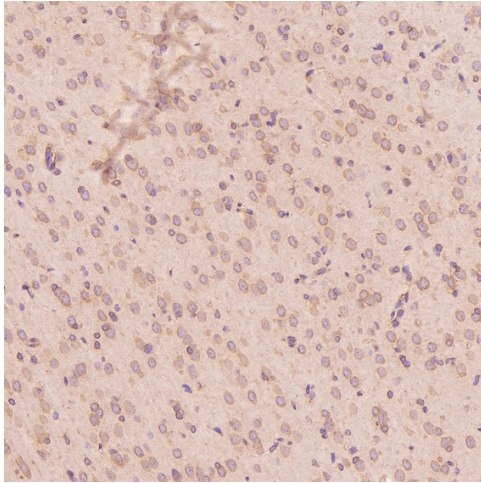
Lane 7: mouse brain tissue lysates,

Lane 8: mouse liver tissue lysates.

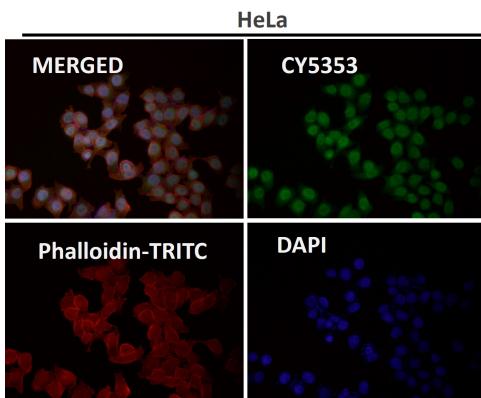
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Calreticulin/CALR antigen affinity purified monoclonal antibody (BM4228) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Calreticulin/CALR at approximately 60 kDa. The expected band size for Calreticulin/CALR is at 48 kDa.

**Anti-Calreticulin/CALR Antibody
(Clone#CGO-3)**

Catalog Number: BM4228



Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex, using the Antibody at 1:150 dilution.



Immunofluorescent analysis using the Antibody at 1:50 dilution.