Datasheet for ABIN390885

anti-Calreticulin antibody (AA 277-305)

7 Images

Go to Product page

Overview

Quantity:	200 µL
Target:	Calreticulin (CALR)
Binding Specificity:	AA 277-305
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Calreticulin antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This CALR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-305 amino acids from the Central region of human CALR.
Clone:	RB21112
Isotype:	Ig Fraction
Predicted Reactivity:	Pr
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	Calreticulin (CALR)

Target Details

Alternative Name:	CALR (CALR Products)
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.
Molecular Weight:	48142
Gene ID:	811
NCBI Accession:	NP_004334
UniProt:	P27797
Pathways:	Retinoic Acid Receptor Signaling Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Nuclear Hormone Receptor Binding, ER-Nucleus Signaling, Unfolded Protein Response

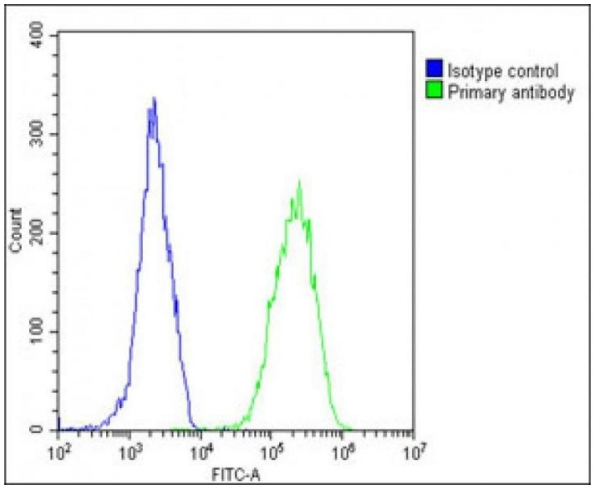
Application Details

Application Notes:	WB: 1:2000. WB: 1:1000. WB: 1:2000. WB: 1:1000. WB: 1:1000. IHC-P: 1:50~100. FC: 1:25
Restrictions:	For Research Use only

Handling

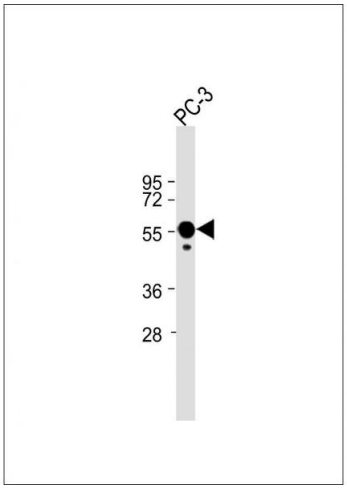
Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Images



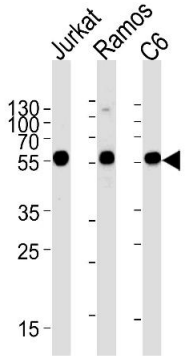
Flow Cytometry

Image 1. Overlay histogram showing HeLa cells stained with (ABIN390885 and ABIN2841096)(green line). The cells were fixed with 2 % paraformaldehyde (10 min) and then permeabilized with 90 % methanol for 10 min. The cells were then icubated in 2 % bovine serum albumin to block non-specific protein-protein interactions followed by the antibody ((ABIN390885 and ABIN2841096), 1:25 dilution) for 60 min at 37 °C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37 °C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Western Blotting

Image 2. Anti-CALR Antibody (Center) at 1:2000 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.



Western Blotting

Image 3. CALR Antibody (Center) (ABIN390885 and ABIN2841096) western blot analysis in Jurkat,Ramos,rat C6 cell line lysates (35 µg/lane).This demonstrates the CALR antibody detected the CALR protein (arrow).

Please check the product details page for more images. Overall 7 images are available for ABIN390885.