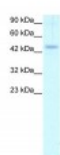




CALR Antibody

CATALOG NUMBER: 27-296



Antibody used in WB on Human Daudi cells at 1.0-2.0 ug/ml.

Specifications

SPECIES REACTIVITY:	Human
TESTED APPLICATIONS:	ELISA, WB
APPLICATIONS:	CALR antibody can be used for detection of CALR by ELISA at 1:12500. CALR antibody can be used for detection of CALR by western blot at 1.0-2.0 ug/mL, and HRP conjugated secondary antibody should be diluted 1:50,000 - 100,000.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1224 - Daudi Cell Lysate
PREDICTED MOLECULAR WEIGHT:	48 kDa
IMMUNOGEN:	Antibody produced in rabbits immunized with a synthetic peptide corresponding a region of human CALR.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Antibody is purified by protein A chromatography method.
PHYSICAL STATE:	Lyophilized
BUFFER:	Antibody is lyophilized in PBS buffer with 2% sucrose. Add 100 uL of distilled water. Final antibody concentration is 1 mg/mL.
CONCENTRATION:	1 mg/ml
STORAGE CONDITIONS:	For short periods of storage (days) store at 4°C. For longer periods of storage, store CALR antibody at -20°C. As with any antibody avoid repeat freeze-thaw cycles.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	CALR, RO, CRT, SSA, cC1qR, HEL-S-99n
ACCESSION NO.:	NP_004334
PROTEIN GI NO.:	4757900

OFFICIAL SYMBOL: CALR

GENE ID: 811

Background

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.

REFERENCES: 1) Urade, R., et al., (2004) Biochemistry 43 (27), 8858-8868.

FOR RESEARCH USE ONLY

December 12, 2016