9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

CALR Human

Calreticulin Human Recombinant
RCP0325

Product Overview

Name	CALR Human
Description	
Calreticulin Human Recombinant	
Accession (Primary)	P27797
Synonyms	
cC1qR, CRT, FLJ26680, RO, SSA, CRP55, Calreticulin, ERp60, CRTC, CALR.	
Introduction	
CALR is a multifunctional protein that acts as a main Ca(2+)-binding (storage) protein in the lumen of the endoplasmic reticulum. Calreticulin is localized in the nucleus, and participates in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is nearly identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear receptors. CALR binds to antibodies in specific sera of systemic lupus and Sjogren patients which have anti-Ro/SSA antibodies, it is well conserved among species, and it is positioned in the endoplasmic and sarcoplasmic reticulum where it binds calcium. The amino terminus of CALR interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. CALR reduces the binding of androgen receptor to its hormone-responsive DNA element and inhibits androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Therefore, CALR acts as a significant modulator of the regulation of gene transcription by nuclear hormone receptors.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	
CALR Human solution containing 20mM Tris-HCl pH-8, 1mM DTT, 0.1M NaCl and 10% glycerol.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	

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Greater than 85% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MEPAVYFKEQ FLDGDGWTSR WIESKHKSDF GKFVLSSGKF YGDEEKDKGL QTSQDARFYA LSASFEPFSN KGQTLVVQFT VKHEQNIDCG GGYVKLFPNS LDQTDMHGDS EYNIMFGPDI CGPGTKKVHV IFNYKGKNVL INKDIRCKDD EFTHLYTLIV RPDNTYEVKI DNSQVESGSL EDDWDFLPPK KIKDPDASKP EDWDERAKID DPTDSKPEDW DKPEHIPDPD AKKPEDWDEE MDGEWEPPVI QNPEYKGEWK PRQIDNPDYK GTWIHPEIDN PEYSPDPSIY AYDNFGVLGL DLWQVKSGTI FDNFLITNDE AYAEEFGNET WGVTKAAEKQ MKDKQDEEQR LKEEEEDKKR KEEEEAEDKE DDEDKDEDEE DEEDKEEDEE EDVPGQAKDE L.

Precautions

CALR Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P27797)