abcam

Product datasheet

Recombinant Human Calreticulin 3 protein ab185419

Description

Product name	Recombinant Human Calreticulin 3 protein
Purity	> 95 % SDS-PAGE. Purity is greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	**Q96L12**
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MTVYFQEEFLDGEHWRNRWLQSTNDSRFGHFRLSSGKF YGHKEKDKGLQT TQNGRFYAISARFKPFSNKGKTLVIQYTVKHEQKMDCGGG YIKVFPADID QKNLNGKSQYYIMFGPDICGFDIKKVHVILHFKNKYHENKKL IRCKVDGF THLYTLILRPDLSYDVKIDGQSIESGSIEYDWNLTSLKKETS PAESKDWE QTKDNKAQDWEKHFLDASTSKQSDWNGDLDGDWPAPM LQKPPYQDGLKPE GIHKDVWLHRKMKNTDYLTQYDLSEFENIGAIGLELWQVR SGTIFDNFLI TDDEEYADNFGKATWGETKGPEREMDAIQAKEEMKKAR EEEEEELLSGKI NRHEHYFNQFHRRNEL
Predicted molecular weight	43 kDa
Amino acids	20 to 384

Specifications

Our **Abpromise guarantee** covers the use of **ab185419** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
	HPLC

Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituent: 100% PBS
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilised protein in 3X PBS. Please aliquot the reconstituted solution and store at < -20 degrees, avoid freeze/thaw cycles.

General Info

Function	During spermatogenesis, may act as a lectin-independent chaperone for specific client proteins such as ADAM3. Required for sperm fertility (By similarity). CALR3 capacity for calcium-binding may be absent or much lower than that of CALR.
Tissue specificity	Testis specific.
Involvement in disease	Defects in CALR3 are the cause of familial hypertrophic cardiomyopathy type 19 (CMH19) [MIM:613875]. CMH19 is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.
Sequence similarities	Belongs to the calreticulin family.
Domain	Can be divided into a N-terminal globular domain, a proline-rich P-domain forming an elongated arm-like structure and a C-terminal acidic domain. The P-domain binds one molecule of calcium with high affinity, whereas the acidic C-domain binds multiple calcium ions with low affinity. The interaction with glycans occurs through a binding site in the globular lectin domain. The zinc binding sites are localized to the N-domain.
Cellular localization	Endoplasmic reticulum lumen.

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