

Product datasheet

Recombinant Human Calreticulin protein ab40609

1 图像

概述

产品名称	重组人Calreticulin蛋白
蛋白长度	Protein fragment

描述

性质	Recombinant
来源	Escherichia coli

氨基酸序列

种属	Human
氨基酸	18 to 417

技术指标

Our [Abpromise guarantee](#) covers the use of **ab40609** in the following tested applications.

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

应用	Mass Spectrometry SDS-PAGE
纯度	> 90 % SDS-PAGE.

形式	Liquid
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补充说明

Calreticulin 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.

制备和贮存

稳定性和存储

Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

Preservative: 0.002% Sodium Azide, 2.5mM Imidazole

Constituents: 3mM Sodium chloride, 10mM Tris, pH 8.0

常规信息

功能

Molecular calcium-binding chaperone promoting folding, oligomeric assembly and quality control in the ER via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export.

序列相似性

Belongs to the calreticulin family.

结构域

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.

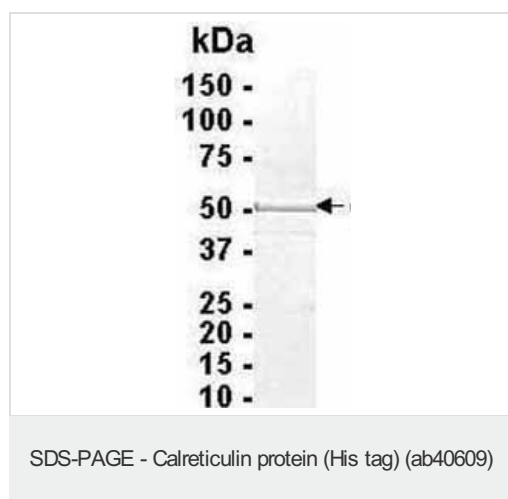
The zinc binding sites are localized to the N-domain.

Associates with PDIA3 through the tip of the extended arm formed by the P-domain.

细胞定位

Endoplasmic reticulum lumen. Cytoplasm > cytosol. Secreted > extracellular space > extracellular matrix. Cell surface. Also found in cell surface (T cells), cytosol and extracellular matrix. Associated with the lytic granules in the cytolytic T-lymphocytes.

图片



Analysis of Calreticulin (ab40609) at 1µg.
Using 4-20% SDS gradient gel. Coomassie
blue stained gel.

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