For Research Use Only

Recombinant Mouse Calreticulin protein (rFc Tag)



Catalog Number: Eg3005

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ $\mu\,g$ protein, LAL method

HEK293-derived Mouse Calreticulin protein Asp18-Leu416(Accession#P14211) with a rabbit IgG Fc tag at the C-

terminus. GeneID:

12317

Accession:

P14211 **Predicted Molecular Mass:**

72.4 kDa

SDS-PAGE:

70-90 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as

protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Calreticulin (CRT) is a multifunctional protein with diverse roles in cellular physiology and pathology. It is primarily localized to the endoplasmic reticulum (ER), where it plays a crucial role in protein folding, calcium nomeostasis, and the unfolded protein response. CRT also has functions outside the ER, including cell surface expression and extracellular matrix interactions, which are implicated in adhesion, migration, phagocytosis, and immunoregulation. CRT's dysfunction has been linked to various diseases, particularly cancer. It is considered a potential diagnostic marker and therapeutic target for cancer due to its role in cellular proliferation, differentiation, and apoptosis.

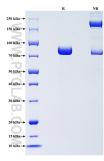
References

1.Nauseef WM. et al. (1995). J Biol Chem. 270(9):4741-4747. 2.Sun J. et al. (2017). Pharmazie. 72(9):503-510. 3.Gold LI. et al. (2010). FASEB J. 24(3):665-683.

Synonyms

Calr, Calregulin, Calreticulin, CRP55, Endoplasmic reticulum resident protein 60

Selected Validation Data



Purity of Recombinant Mouse Calreticulin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.