For Research Use Only

Recombinant Human Complement factor B protein (His Tag)



Catalog Number: Eg1224

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human Complement factor B protein Thr26-Leu764 (Accession # P00751-1) with a His tag at the C-terminus.

GeneID:

629

Accession:

P00751-1

Predicted Molecular Mass:

84.1 kDa

SDS-PAGE:

85-100 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° C to -80° C as lyophilized proteins. 3 months, -20° C to -80° C 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

Complement Factor B (CFB) is a vital component of the alternative pathway of the complement system, playing a central role in immune responses and inflammation. CFB is synthesized mainly by hepatocytes and macrophages and is involved in the defense against cellular damage and inflammation. It binds to C3b and is cleaved by Factor D to form the active Bb fragment, which then combines with C3b to generate the C3 or C5 convertase, initiating an inflammatory response, cytolysis, phagocytosis, and B cell activation. CFB is functionally similar to the classical pathway component C2, as both form the catalytic subunit of C3 convertases after activation and must be bound to be active.

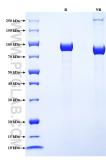
References

- Wenjun Wang. et al. (2021). Dev Comp Immunol. 118:103992.
 Eva Torreira. et al. (2009). J Immunol. 183(11):7347-7351.
 Lin Zou. et al. (2016). J Immunol. 196(6):2788-2798.

Synonyms

CFB, BF, BFD, C3/C5 convertase, CFAB

Selected Validation Data



Purity of Recombinant Human Complement factor B 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.