Human C7 / Complement component 7 Protein (His Tag)

Catalog Number: **13848-H08H**

General Information

Gene Name Synonym:

Complement C7

Protein Construction:

A DNA sequence encoding the human C7 (P10643) (Met1-Gln843) with a C-terminal polyhistidine tag was expressed.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 88 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 23

Molecular Mass:

The recombinant human C7 comprises 832 amino acids and has a predicted molecular mass of 92.6 kDa. The apparent molecular mass of the protein is approximately 92-98 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

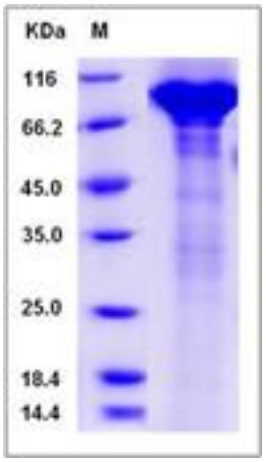
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Complement component 7 is a component of the complement system. It belongs to the complement C6/C7/C8/C9 family. It contains 1 EGF-like domain, 1 LDL-receptor class A domain, 1 MACPF domain, 2 Sushi (CCP/SCR) domains and 2 TSP type-1 domains. Complement component 7 serves as a membrane anchor. It participates in the formation of Membrane Attack Complex (MAC). People with C7 deficiency are prone to bacterial infection. It is a constituent of MAC that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. Defects in C7 are a cause of complement component 7 deficiency (C7D). A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by Neisseria gonorrhoeae or Neisseria meningitidis.

References

1.Bossi F, *et al.* (2009) C7 is expressed on endothelial cells as a trap for the assembling terminal complement complex and may exert anti-inflammatory function. Blood. 113(15):3640-8. 2.Kuijpers TW, *et al.* (2010) Complement factor 7 gene mutations in relation to meningococcal infection and clinical recurrence of meningococcal disease. Mol Immunol. 47(4):671-7. 3.Thomas AD, *et al.* (2012) Characterization of a large genomic deletion in four Irish families with C7 deficiency. Mol Immunol. 50(1-2):57-9.