Mouse Serum amyloid P component / APCS / SAP Protein (His Tag)

Catalog Number: **50113-M08H**

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General Information

Gene Name Synonym:

HEL-S-92n; PTX2; SAP; Sap

Protein Construction:

A DNA sequence encoding the mouse APCS (NP_035448.2) (Met 1-Glu 224) precursor was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA . Immobilized mouse APCS at 10 μg/ml (100 μl/well) can bind biotinylated human Fibronectin Fragment 2 with a linear ranger of 0.625-5 μg/ml . 2. Measured by its ability to bind mouse CD64-AVI in a functional ELISA .

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: Gln 21

Molecular Mass:

The secreted recombinant mouse APCS consists of 215 amino acids and has a calculated molecular mass of 25.3 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 28 kDa protein 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:

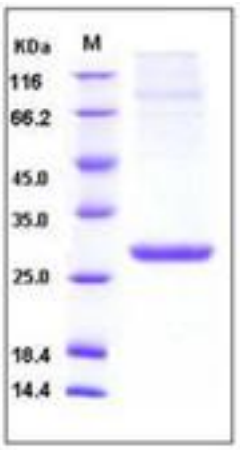
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Serum amyloid P component (SAP) is the identical serum form of amyloid P component (AP), a highly preserved plasma protein named for its ubiquitous presence in amyloid deposits. As a normal plasma protein first identified as the pentagonal constituent of in vivo pathological deposits called "amyloid". Serum amyloid P component represents another member of the pentraxin family, a highly conserved group of molecules that may play a role in innate immunity. SAP is a key negative regulator for innate immune responses to DNA and may be partly responsible for the insufficient immune responses after DNA vaccinations in humans. SAP suppression may be a novel strategy for improving efficacy of human DNA vaccines and requires further clinical investigations.

References

1.Wang Y, *et al.* (2011) Human serum amyloid P functions as a negative regulator of the innate and adaptive immune responses to DNA vaccines. J Immunol. 186(5): 2860-70.
2.Hawkins PN. (2002) Serum amyloid P component scintigraphy for diagnosis and monitoring amyloidosis. Curr Opin Nephrol Hypertens. 11(6): 649-55.
3.Noursadeghi M, *et al.* (2000) Role of serum amyloid P component in bacterial infection: protection of the host or protection of the pathogen. Proc Natl Acad Sci U S A. 97: 14584-9.