Human APOM Protein (Fc Tag)

Catalog Number: **13495-H02H**

General Information

Gene Name Synonym:

apo-M; G3a; HSPC336; NG20

Protein Construction:

A DNA sequence encoding the human APOM (O95445) (Met 1-Asn 188) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % 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: Cys 23

Molecular Mass:

The recombinant human APOM/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 407 amino acids and has a predicted molecular mass of 45.6 kDa. The apparent molecular mass of the reduced monomer is approximately 50 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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:

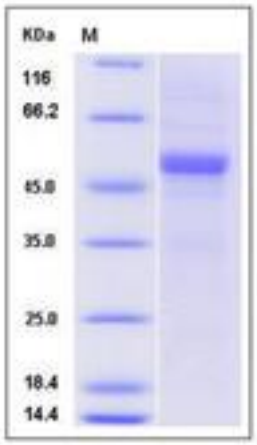
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ApoM (apolipoprotein M) is an apolipoprotein and member of the lipocalin protein family. The lipocalins share limited regions of sequence homology and a common tertiary structure architecture. They have an eight-stranded, antiparallel, symmetrical _-barrel fold, which is in essence a beta sheet which has been rolled into a cylindrical shape. Inside this barrel is located a ligand binding site. They transport small hydrophobic molecules such as steroids, bilins, retinoids, and lipids. Lipocalins have been associated with many biological processes, among them immune response, pheromone transport, biological prostaglandin synthesis, retinoid binding, and cancer cell interactions. Lipocalins are comparatively small in size, and are thus less complicated to study as opposed to large, bulky proteins. They can also bind to various ligands for different biological purposes. ApoM is associated with high density lipoproteins and to a lesser extent with low density lipoproteins and triglyceride-rich lipoproteins. ApoM is involved in lipid transport and can bind sphingosine-1-phosphate, myristic acid, palmitic acid and stearic acid, retinol, all-trans-retinoic acid and 9-cis-retinoic acid.

References

1.Xu N, *et al.* (1999) A novel human apolipoprotein (apoM). J Biol Chem. 274(44):31286-90. 2.Duan J, *et al.* (2001) Proposed lipocalin fold for apolipoprotein M based on bioinformatics and site-directed mutagenesis. FEBS Lett. 49 (1-2):127-32. 3.Albertella MR, *et al.* (1997) Localization of eight additional genes in the human major histocompatibility complex, including the gene encoding the casein kinase II beta subunit (CSNK2B). Genomics. 36(2):240-51.