Data Sheet (Cat.No.TMPY-00337)

TargetMol

Apolipoprotein M/APOM Protein, Human, Recombinant (His)

General Information

Synonyms: DADB-127H9.5;apo-M;apolipoprotein M;NG20;G3a;HSPC336

Protein Construction: A DNA sequence encoding the human APOM (NP_061974.2) (Cys23-Asn188) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Cys 23

Species: Human

Expression Host: P. pastoris (Yeast)

Accession: O95445-1

Molecular Weight: 19.9 kDa (predicted)

QC Testing

Biological Activity: Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

Formulation: Supplied as sterile PBS, 40% Glycerol.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

Shipping with blue ice.

Protein Background

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.

Reference

Xu N,et al.(1999) A novel human apolipoprotein (apoM). J Biol Chem. 274(44):31286-90.
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.
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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481