

Apolipoprotein-D Recombinant Protein | APOD recombinant protein

Recombinant Human Apolipoprotein-D

CATALOG #
AAA38585

HOST
E Coli

PRODUCT SYNONYMS

Apolipoprotein-D; Recombinant Human Apolipoprotein-D; Apo D Human; Apolipoprotein-D Human Recombinant; Apolipoprotein D; Apo-D; ApoD; APOD recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% as determined by SDS-PAGE.
Form/Format	Filtered (0.4 um) and lyophilized from 1mg/ml in 4mM KH ₂ PO ₄ , 16mM Na ₂ HPO ₄ and 115mM NaCl pH 7.5. Filtered White lyophilized (freeze-dried) powder.
Sequence	FHLGKCPNPP VQENFDVNKY PGRWYEIEKI PTFENGRCI QANYSLMENG KIKVLNQELR ADGTVNQIEG EATPVNLTEP AKLEVKFSWF MPSAPYHILA TDYENYALVY SCTSISQSFH VDFAWILARN VALPPETVDS LKNILTSNNI DVKKMTVTDQ VNCPLSAHH HHHH
Sequence Length	189
Solubility	It is recommended to add deionized H ₂ O to a working volume of 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter this product by an appropriate sterile filter before using it in the cell culture.
Preparation and Storage	Store lyophilized protein at -20 degree C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4 degree C for a limited period of time; it does not show any change after two weeks at 4 degree C.

ADDITIONAL INFORMATION

Related Product Information for APOD recombinant protein

Description: Apolipoprotein-D Human Recombinant His Tag fusion protein at C-terminus (7 highlighted a.a.) produced in E Coli is a single, non-glycosylated, Polypeptide chain containing 174 amino acids and having a molecular mass of 19.82kDa. The protein a.a sequence corresponds to the UniProtKB/Swiss-Prot entry P05090. The Following gene modifications were made: Trp99His, Cys116Ser, Ile118Ser, Leu120Ser amino acids exchanges were introduced at the surface of Apolipoprotein-D to enhance the protein's solubility and another three Leu23Pro, Pro133Val, Asn134Ala amino acids exchanges which facilitate its genetic manipulation. The Apolipoprotein-D is purified by proprietary chromatographic techniques.

Introduction: Apolipoprotein-D is mainly associated with high density lipoproteins in human plasma. Apolipoprotein-D is an atypical apolipoprotein and, based on its primary structure, Apolipoprotein-D is a member of the lipocalin family. Lipocalins adopt a beta-barrel tertiary structure and transport small hydrophobic ligands. Apolipoprotein-D binds cholesterol, progesterone, pregnenolone, bilirubin and arachidonic acid. Apolipoprotein-D is expressed in numerous tissues having high levels of expression in spleen, testes and brain. Apolipoprotein-D is present at high concentrations in the cyst fluid of women with gross cystic disease of the breast, a condition associated with increased risk of breast cancer. Apolipoprotein-D accumulates in regenerating peripheral nerves and in the cerebrospinal fluid of patients with neurodegenerative conditions, such as Alzheimer's disease. Apolipoprotein-D participates in maintenance and repair within the central and peripheral nervous systems. Apolipoprotein-D is a multi-ligand, multi-functional transporter and transports a ligand from 1 cell to another within an organ, scavenge a ligand within an organ for transport to the blood or could transport a ligand from the circulation to specific cells within a tissue.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502163
NCBI GeneID	347
NCBI Accession #	NP_001638.1
NCBI GenBank Nucleotide #	NM_001647.3
UniProt Accession #	P05090; Q6IBG6; B2R579; D3DNW6
Molecular Weight	21,276 Da
NCBI Official Full Name	apolipoprotein D
NCBI Official Synonym Full Names	apolipoprotein D
NCBI Official Symbol	APOD
NCBI Protein Information	apolipoprotein D; apo-D
UniProt Protein Name	Apolipoprotein D
UniProt Gene Name	APOD
UniProt Synonym Gene Names	Apo-D; ApoD
UniProt Entry Name	APOD_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.