Data Sheet (Cat.No.TMPY-04310)

TargetMol

Apolipoprotein A-IV/APOA4 Protein, Human, Recombinant (His)

General Information

Synonyms:	apolipoprotein A-IV
Protein Construction:	A DNA sequence encoding the human APOA4 (NP_000473.2) (Met1-Ser396) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Glu 21
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P06727
Molecular Weight:	44.8 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:	> 95 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Apolipoprotein is genetically associated with the risk of Alzheimer's disease (AD). The APOA1, APOC3, and APOA4 genes are closely linked and located on human chromosome 11. There was a decreased trend for levels of APOA1, APOC3, and APOA4 in AD patients. CONCLUSION: Low levels of APOA1, APOC3, and APOA4 are associated with risk of AD. APOA1, APOC3, and APOA4 should be developed as combined drugs for the therapy of AD. SNP(single nucleotide polymorphisms)in APOA1and APOA4 genes influences atherogenic characteristics of LDL particles in

response to diet.