Data Sheet (Cat.No.TMPK-00900)

TargetMol

MFAP4 Protein, Human, Recombinant (His & Flag)

General Information

Synonyms:	Microfibril-associated glycoprotein 4;Mfap4
Protein Construction:	Val22-Ala255
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P55083-1
Molecular Weight:	28.6 kDa (predicted). Due to glycosylation, the protein migrates to 38-45 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Human MFAP4, His Tag at 1μg/ml (100μl/well) on the plate. Dose response curve for Anti-MFAP4 Antibody, hFc Tag with the EC50 of 7.6ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis 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, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

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

Microfibril-associated glycoprotein 4 (MFAP4) is an extracellular matrix protein belonging to the fibrinogen-related protein superfamily. MFAP4 is produced by vascular smooth muscle cells and is highly enriched in the blood vessels of the heart and lung, where it is thought to contribute to the structure and function of elastic fibers. Genetic studies in humans have implicated MFAP4 in the pathogenesis of Smith-Magenis syndrome, in which patients present with multiple congenital abnormalities and mental retardation, as well as in the severe cardiac

malformation left-sided congenital heart disease.

Reference

Ong SLM, et al. Microfibril-associated glycoprotein 4 (Mfap4) regulates haematopoiesis in zebrafish. Sci Rep. 2020 Jul 16;10(1):1180doi: 10.1038/s41598-020-68792-8. PMID: 32678226; PMCID: PMC7366704.

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