Data Sheet (Cat.No.TMPY-03052)

TargetMol

MFAP5 Protein, Human, Recombinant (His)

General Information

Synonyms:	microfibrillar associated protein 5;MFAP-5;AAT9;MAGP2;MP25;MAGP-2
Protein Construction:	A DNA sequence encoding the human MFAP5 (Q13361) (Met1-Leu173) with a C-terminal polyhistidine tag was expressed. Predicted N terminal: Arg 22
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q13361
Molecular Weight:	18.7 kDa (predicted); 54 and 29 kDa (reducing conditions)

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:	> 85 % 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:

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 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.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

MFAP5 (Microfibril Associated Protein 5, also known as MAGP2) is a Protein Coding gene. MFAP5 is a component of the elastin-associated microfibrils. It belongs to the MFAP family. As a 25-kD microfibril-associated glycoprotein, MFAP5 is rich in serine and threonine residues. It stimulates the assembly of elastic fibers, a complex structure composed of a tropoelastin inner core and microfibril outer mantle comprising proteins such as fibrillins and microfibril-associated glycoproteins that guide tropoelastin deposition. MFAP5 also stabilizes type 1 procollagen

and thus plays an important role in extracellular matrix homeostasis. It has multiple binding regions on fibrillins and has a covalent periodic association with fibrillin-containing microfibrils. Diseases associated with MFAP5 include Aortic Aneurysm, Familial Thoracic 9, and Familial Thoracic Aortic Aneurysm And Aortic Dissection.

Reference

Hatzinikolas G, et al. (1998) The exon structure of the human MAGP-2 gene. Similarity with the MAGP-1 gene is confined to two exons encoding a cysteine-rich region. J Biol Chem. 273(45):29309-14.

Gibson MA, et al. (1996) Further characterization of proteins associated with elastic fiber microfibrils including the molecular cloning of MAGP-2 (MP25). J Biol Chem. 271(2): 1096-103.

Miyamoto A, et al. (2006) Microfibrillar proteins MAGP-1 and MAGP-2 induce Notch1 extracellular domain dissociation and receptor activation. J Biol Chem. 281(15):10089-97.

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