

Recombinant Human AFM/Afamin Protein (His Tag)

Catalog Number: PKSH030684

Note: Centrifuge before opening to ensure complete recovery of vial contents.

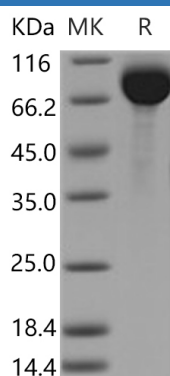
Description

| | |
|----------------------|--|
| Species | Human |
| Source | HEK293 Cells-derived Human AFM/Afamin protein Met 1-Asn599, with an C-terminal His |
| Calculated MW | 68.0 kDa |
| Observed MW | 68-94 kDa |
| Accession | P43652 |
| Bio-activity | Not validated for activity |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Afamin is an 87 kDa glycoprotein with five predicted N-glycosylation sites. Afamin's glycan abundance contributes to conformational and chemical inhomogeneity presenting great challenges for molecular structure determination. Afamin, a human plasma glycoprotein and putative transporter of hydrophobic molecules, has been shown to act as extracellular chaperone for poorly soluble, acylated Wnt proteins, forming a stable, soluble complex with functioning Wnt proteins. The 2.1-Å crystal structure of glycosylated human afamin reveals an almost exclusively hydrophobic binding cleft capable of harboring large hydrophobic moieties. Afamin plays a role in anti-apoptotic cellular processes related to oxidative stress and is associated with insulin resistance and other features of metabolic syndrome. Afamin may serve as a new early biomarker for pathological glucose metabolism during pregnancy. And first trimester screening for pre-eclampsia could be provided by a combination of afamin and placental bed vascularization. Moreover, the combination of first trimester serum afamin levels with BMI could provide a possible screening for gestational diabetes mellitus.