Recombinant Human VAP-1/AOC3 Protein (Fc Tag)

Catalog Number: PKSH033590

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

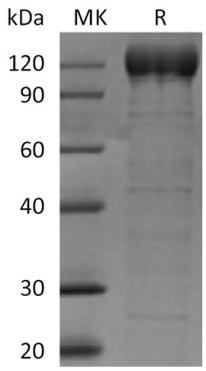
Description

Species	Human
Source	HEK293 Cells-derived Human VAP-1/AOC3 protein Arg28-Asn763, with an C-terminal Fc
Calculated MW	108.5 kDa
Observed MW	120 kDa
Accession	Q16853
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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM Tris-HCl, 500mM NaCl, pH 8.0. 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

Membrane primary amine oxidase(AOC3); also known as vascular adhesion protein (VAP-1) and HPAO; this protein is a member of the semicarbazide-sensitive amine oxidase (SSAO) family. VAP-1 is a type 1 membrane-bound glycoprotein that has a distal adhesion domain and an enzymatically active amine oxidase site outside of the membrane; VAP-1 has adhesive properties; functional monoamine oxidase activity; and possibly plays a role in glucose handling; leukocyte trafficking; and migration during inflammation. This rise in metabolic products contributes to generating advanced glycation end-products and oxidative stress along with the monoamine detoxification in the organism. It is highly expressed on the endothelium of the lung and trachea; and absent from leukocytes and epithelial cells. Membrane-bound VAP-1 releases an active; soluble form of the protein; which may be conducive to increased inflammation and the progression of many vascular disorders. In particular; elevation of VAP-1 activity and the increased enzymatic-mediated deamination is proposed to play a role in renal and vascular disease; oxidative stress; acute and chronic hyperglycemia; and diabetes complications.