Recombinant Protein Technical Manual

Recombinant Human SerpinF2/SERPINF2 Protein (His Tag)(Active)

RPES4628

Product Data:

Product SKU: RPES4628

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000925.2

Protein Information:

Molecular Mass:	53.2 kDa
AP Molecular Mass:	70 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate,Mca-RPKPVE-Nval-WRK(Dnp)-NH2 (Anaspec, Catalog#27114). The IC50 value is < 0.5 nM.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	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℃ 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 sterile 25mM Tris, 150mM NaCl, pH 7.5
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	A2AP;AAP;ALPHA-2-PI;API;PLI

Immunogen Information:

Sequence: Met 1-Lys 491

Background:

SerpinF2, also known as alpha-2 antiplasmin (alpha-2 AP), is a member of the Serpin superfamily. SerpinF2 is the principal physiological inhibitor of serine protease plasmin, and as well as, an efficient inhibitor of trypsin and chymotrypsin. This protease is produced mainly by liver and kidney, and also expressed in muscle, intestine, central nervous system, and placenta also express this protein at a moderate level. It is indicated that Serpin F2 is a key regulator of plasmin-mediated proteolysis in these tissues. Alpha-2 AP is an unusual serpin in that it contains extensive N- and C-terminal sequences flanking the serpin domain. The N-terminal sequence is crosslinked to fibrin by factor XIIIa, whereas the C-terminal region mediates the initial interaction with plasmin. SerpinF2 is one of the inhibitors of fibrinolysis, which acts as the primary inhibitor of plasmin(ogen). It is a specific plasmin inhibitor, and is important in modulating the effectiveness and persistence of fibrin with respect to its susceptibility to digestion and removal by plasmin. Alpha-2 AP plays the dominant role in inhibiting both plasma clot lysis and thrombus lysis, and accordingly, the congenital deficiency of Alpha-2 antiplasmin causes a rare bleeding disorder because of increased fibrinolysis. Thus, it may be a useful target for developing more effective treatment of thrombotic diseases.