Active Recombinant Human TFPI2, Animal Free

Cat. No. TFPI2-129H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human TFPI-2 domain 1, is a 9.3 kDa protein containing 79 amino acids residues. Human recombinant protein expressed in Nicotiana benthamiana. Recombinant AGV212contains a 6-His-tag at the N-terminal end, is produced by transient expression in non-transgenic plants and is purified by sequential chromatography (FPLC). This product contains no animal–derived components or impurities. Animal free product.
Species	Human
Source	Nicotiana Benthamiana
Description	Recombinant human TFPI-2 domain 1 or AGV 212 is a protease inhibitor peptide generated from the first Kunitz domain of the human Tissue Factor Protein Inhibitor 2 (TFPI-2) protein, after site-directed mutagenesis to increase its activity. It is arranged in a single polypeptide chain that is linked by three disulphide bridges. AGV 212 is quite stable and inhibits trypsin with high efficiency and Ki lower than TFPI-2 one. TFPI-2 has been shown to inhibit Endothelial Cell Matrix (ECM) proteases essential for angiogenesis and metastasis.
Form	Lyophilized powder containing phosphate buffer salts, pH 7.1.
Bio-activity	The activity of the inhibitor is expressed as the amount of trypsin inhibited per milligram of inhibitor. The ability to prevent the hydrolysis of benzoyl-L-arginine ethyl ester hydrochloride by trypsin is measured by spectrophotometer. One mg protein will

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	inhibit 1-1.5 mg trypsin with activity of approximately 10,000 BAEE units per mg protein.
Molecular Mass	Recombinant human TFPI-2 domain 1, is a 9.3 kDa protein containing 79 amino acids residues.
AA Sequence	HHHHHHGAAQEPTGNNAEICLLPLDYGPCKALLLRYYYDRYTQSCRQFLYGGCEGN ANNFYTWEACDDACWRIEK VPKV
Endotoxin	< 0.04="" eu="" ug="" protein="" (lal="">
Purity	>97% by SDS-PAGE gel
Applications	Trypsin inhibitor, Western blot, Immunogen
Storage	This lyophilized preparation is stable at 2-8°C, but should be kept at –20°C for long term storage. Diluted solutions are less stable than concentrated ones. Repeated freezing and thawing is not recommended.
Reconstitution	Lyophilized protein should be reconstituted adding 1 ml of sterile water to the vial, which gives a concentration of 1 mg of protease inhibitor per ml. At higher concentration the solubility may be reduced and multimers generated. Soluble in water and in aqueous buffers of low ionic strengths. Repeated freeze-thaw cycles should be avoided. Optimal reconstitution please follow batch Quality Control sheet instructions.

GENE INFORMATION

Gene Name	TFPI2 tissue factor pathway inhibitor 2 [Homo sapiens]
Official Symbol	TFPI2

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	TFPI2; tissue factor pathway inhibitor 2; PP5; REF1; TFPI 2; placental protein 5; TFPI-2; FLJ21164;
Gene ID	7980
mRNA Refseq	NM_006528
Protein Refseq	NP_006519
MIM	600033
UniProt ID	P48307
Chromosome Location	7q
Function	extracellular matrix structural constituent; peptidase inhibitor activity; serine-type endopeptidase inhibitor activity;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA