

## Active Recombinant Human TFPI2, Animal Free

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

### SPECIFICATION

<b>Product Overview</b>	<p>Recombinant human TFPI-2 domain 1, is a 9.3 kDa protein containing 79 amino acids residues. Human recombinant protein expressed in <i>Nicotiana benthamiana</i>.</p> <p>Recombinant AGV212 contains 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.</p>
<b>Species</b>	Human
<b>Source</b>	<i>Nicotiana Benthamiana</i>
<b>Description</b>	<p>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 <math>K_i</math> lower than TFPI-2 one. TFPI-2 has been shown to inhibit Endothelial Cell Matrix (ECM) proteases essential for angiogenesis and metastasis.</p>
<b>Form</b>	Lyophilized powder containing phosphate buffer salts, pH 7.1.
<b>Bio-activity</b>	<p>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</p>

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	inhibit 1-1.5 mg trypsin with activity of approximately 10,000 BAEE units per mg protein.
<b>Molecular Mass</b>	Recombinant human TFPI-2 domain 1, is a 9.3 kDa protein containing 79 amino acids residues.
<b>AA Sequence</b>	HHHHHHGAAQEPTGNNAEICLLPLDYGPCKALLRYYYDRYTQSCRQFLYGGCEGN ANNFYTWEACDDACWRIEK VPKV
<b>Endotoxin</b>	< 0.04 EU/ug protein (LAL)>
<b>Purity</b>	>97% by SDS-PAGE gel
<b>Applications</b>	Trypsin inhibitor, Western blot, Immunogen
<b>Storage</b>	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.
<b>Reconstitution</b>	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.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	TFPI2 tissue factor pathway inhibitor 2 [ Homo sapiens ]
<b>Official Symbol</b>	TFPI2

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

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