Active Recombinant Human SERPINB2 protein, His-tagged

Cat. No. SERPINB2-5060H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human SERPINB2 protein(P05120)(1~415 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	1-415 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Serpin B2, also known as PAI-2, is an approximately 60 kDa serine protease inhibitor. It is primarily secreted by macrophages and monocytes and can form disulfide-linked multimers. Serpin B2 inhibits both the urokinase-type and tissue-type plasminogen ac tivators (uPA and tPA). Serpin B2 also promotes the clearance of uPA by enhancing it s binding and uptake by LRP. It limits fibril formation by Huntington protein (HTT) and beta-Amyloid peptides. It promotes Th2 biased immune responses and is important fo r intestinal CCL2 production, monocyte recruitment, and nematode clearance. A non-glycosylated form of Serpin B2 is retained intracellularly where it interferes with TNF-a induced apoptosis by protecting the Retinoblastoma protein (RB1) from calpain digest ion. It also inhibits proteasome activity in activated endothelial cells. The activity of rec ombinant human PAI-2 was measured by its ability to inhibit uPA cleavage of a peptid e substrate, N-carbobenzyloxy-Gly-Gly-Arg-7-amido-4-methylcoumarin (Z-GGR-AMC)

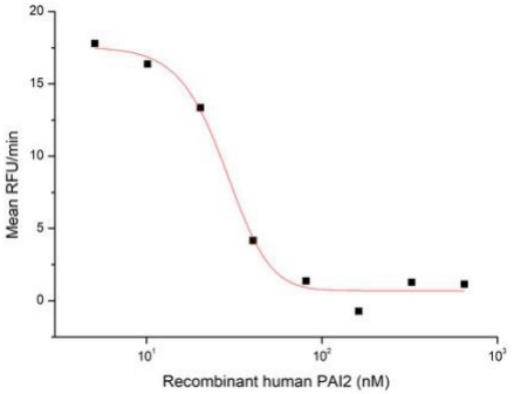
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	in the assay buffer 50 mM Tris, 0.01% Tween 20, pH 8.5. The 50 ul different concentrations of rhPAI-2 (MW: 48.2 KD) was incubated with 50ul 2ug/ml rhuPA (EPA140Mu61) at room temperature for 15 minutes. Loading 50 µ of the incubated mixtures into empty wells of a plate, and start the reaction by adding 50 µ of 200 µM substrate (Z-GGR-AMC). Include a substrate blank containing 50 µ of assay buffer and 50 µ of 200 µM substrate. Then read at excitiation and emission wavelengths of 380 nm and 460 nm, respectively, in kinetic mode for 5 minutes. The result was shown and it was obvious that recombinant human PAI2 significantly decreased uPA activity. The inhibition IC50 was <28 nM.
Molecular Mass	48.2kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 80% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

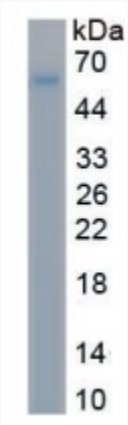
GENE INFORMATION

Gene Name	SERPINB2 serpin peptidase inhibitor, clade B (ovalbumin), member 2 [Homo sapiens]
Official Symbol	SERPINB2
Synonyms	SERPINB2; serpin peptidase inhibitor, clade B (ovalbumin), member 2; PAI2, PLANH2, serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 2;

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	plasminogen activator inhibitor 2; HsT1201; serpin B2; monocyte Arg-serpin; urokinase inhibitor; placental plasminogen activator inhibitor; plasminogen activator inhibitor, type II (arginine-serpin); serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 2; PAI; PAI2; PAI-2; PLANH2;
Gene ID	5055
mRNA Refseq	NM_001143818
Protein Refseq	NP_001137290
MIM	173390
UniProt ID	P05120
Activity	

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SDS-PAGE	

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