

Mouse Monoclonal Antibody to Human Serine Peptidase Inhibitor, Clade D, Member 1

Cat. No. CAB11600MH **Lot. No.** (See product label)

SPECIFICATION

Product Overview Mouse Monoclonal Antibody to Human Serine Peptidase Inhibitor, Clade D, Member 1

Species Human

Source Mouse

Antigen Description SerpinD1, also known as heparin cofactor II (HCII), is a member of Serpin superfamily of the serine proteinase inhibitors. HCII is a glycoprotein in human plasma that inhibits thrombin and chymotrypsin, and the rate of inhibition of thrombin is rapidly increased by Dermatan sulfate (DS), heparin (H) and glycosaminoglycans (GAG). The stimulatory effect of glycosaminoglycans on the inhibition is mediated, in part, by the N-terminal acidic domain of HCII. Interestingly, a C-terminal His-tagged recombinant HCII exhibits enhanced activity of thrombin inhibition. It has been suggested that HCII plays a unique and important role in vascular homeostasis, and accordingly mutations in this gene or congenital HCII deficiency is potentially associated with thrombosis.

Specificity Human SerpinD1 / HC2. No cross-reactivity in ELISA with Human SerpinA3; Human SerpinC1; Human SerpinI1; Mouse SerpinD1; Mouse SerpinF1; Mouse SerpinF2; Human cell lysate (293 cell line)

Immunogen Recombinant Human SerpinD1 / HC2 Protein

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Isotype	Mouse IgG1
Clone	4D12F13
Applications	Western blot; ELISA
Dilution	Western blot: This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human SerpinD1 in WB. Using a DAB detection system, the detection limit for Human SerpinD1 is approximately 2 ng/lane under non-reducing conditions and 1 ng/lane under reducing conditions. Direct ELISA: This antibody can be used at 0.5-1 µg/mL with the appropriate secondary reagents to detect Human SerpinD1. The detection limit for Human SerpinD1 is approximately 0.31 ng/well.
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, human cell-derived, recombinant Human SerpinD1 / HC2. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	0.2 µm filtered solution in PBS with 5% trehalose
Storage	This antibody can be stored at 2-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70 °C. Preservative-Free. Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name [SERPIND1 serpin peptidase inhibitor, clade D \(heparin cofactor\), member 1 \[Homo sapiens \]](#)

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Official Symbol	SERPIND1
Synonyms	SERPIND1; serpin peptidase inhibitor, clade D (heparin cofactor), member 1; HCF2,serine (or cysteine) proteinase inhibitor, clade D (heparin cofactor), member 1; heparin cofactor 2; D22S673; HC II; HC2; heparin cofactor II; HLS2; serpin D1; leuserpin 2; protease inhibitor leuserpin-2; serine (or cysteine) proteinase inhibitor, clade D (heparin cofactor), member 1; LS2; HCF2; HCII; THPH10;
Gene ID	3053
mRNA Refseq	NM_000185
Protein Refseq	NP_000176
MIM	142360
UniProt ID	P05546
Chromosome Location	22q11.21
Pathway	Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem; Complement and coagulation cascades, conserved biosystem;
Function	endopeptidase inhibitor activity; heparin binding; serine-type endopeptidase inhibitor activity;

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