# **Elabscience**®

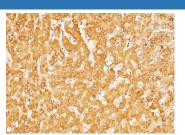
## **Recombinant SerpinD1 Monoclonal Antibody**

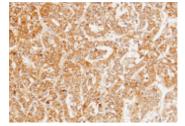
#### catalog number: AN300182P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human
Immunogen	Recombinant Human SerpinD1 protein
Host	Rabbit
Isotype	IgG
Clone	4D4
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS
Applications	Recommended Dilution
ІНС-Р	1:100-1:500

#### Data





Immunohistochemistry of paraffin-embedded human liver using SerpinD1 Monoclonal Antibody at dilution of 1:200. Immunohistochemistry of paraffin-embedded human hepatoma using SerpinD1 Monoclonal Antibody at dilution of 1:200.

Preparation & Storage	
Storage	This antibody can be stored at 2°C-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°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

### Background

SerpinD1, also known as heparin cofactor II, 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 an unique and important role in vascular homeostasis, and accordingly mutations in this gene or congenital HCII deficiency is potentially associated with thrombosis. HCII specifically inhibits thrombin action at the site of vascular wall injury and HCII-thrombin complexes have been detected in human plasma. HCII protects against thrombin-induced vascular remodeling in both humans and mice and HCII is a predictive biomarker and therapeutic target for atherosclerosis. SerpinD1 also inhibits chymotrypsin, but in a glycosaminoglycan-independent manner.