Recombinant HEP2 protein (His tag)

Catalog Number	546686
Synonyms	Heparin cofactor II; HC-II; Protease inhibitor leuserpin-2; HLS2; Serpin D1
Species	Human
Expression System	E. coli
Accession	P05546
Molecular Weight	Predictes a molecular mass of 46.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	112-499
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 112-499 aa (P05546) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Introducing the recombinant Heparin cofactor II (HC-II) fragment (residues 112-499), a stable and soluble protein unit derived from human SERPIND1. This fragment is designed for structural and biochemical studies, offering a reliable tool to investigate the thrombin-inhibitory and chemotactic functions of HC-II in a research setting. Heparin cofactor II (HC-II), encoded by the SERPIND1 gene in humans, functions as a key thrombin inhibitor that is activated by glycosaminoglycans such as heparin or dermatan sulfate. In the presence of dermatan sulfate, HC-II becomes the primary thrombin inhibitor, surpassing antithrombin III in activity. Additionally, it inhibits chymotrypsin independently of glycosaminoglycans and possesses chemotactic activity, with N-terminal peptides attracting monocytes and neutrophils. An isoform (isoform 2) shows negligible inhibitory effects on thrombin, tissue plasminogen activator (tPA), and factor Xa in vitro. The full-length protein plays a critical role in coagulation regulation and immune response pathways, making it a significant target for cardiovascular and inflammatory research.