OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC120039

Heparin Cofactor II (SERPIND1) (NM_000185) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Heparin Cofactor II (SERPIND1) (NM_000185) Human Untagged Clone
Tag:	Tag Free
Symbol:	Heparin Cofactor II
Synonyms:	D22S673; HC2; HCF2; HCII; HLS2; LS2; THPH10
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC120039 sequence for NM_000185 edited (data generated by NextGen Sequencing)

ATGAAACACTCATTAAACGCACTTCTCATTTTCCTCATCATAACATCTGCGTGGGGTGGG
AGCAAAGGCCCGCTGGATCAGCTAGAGAAAGGAGGGGAAACTGCTCAGTCTGCAGATCCC
CAGTGGGAGCAGTTAAATAACAAAAACCTGAGCATGCCTCTTCTCCCTGCCGACTTCCAC
AAGGAAAACACCGTCACCAACGACTGGATTCCAGAGGGGGAGGAGGACGACGACTATCTG
GACCTGGAGAAGATATTCAGTGAAGACGACGACTACATCGACATCGTCGACAGTCTGTCA
GTTTCCCCGACAGACTCTGATGTGAGTGCTGGGAACATCCTCCAGCTTTTTCATGGCAAG
AGCCGGATCCAGCGTCTTAACATCCTCAACGCCAAGTTCGCTTTCAACCTCTACCGAGTG
CTGAAAGACCAGGTCAACACTTTCGATAACATCTTCATAGCACCCGTTGGCATTTCTACT
GCGATGGGTATGATTTCCTTAGGTCTGAAGGGAGAGACCCATGAACAAGTGCACTCGATT
TTGCATTTTAAAGACTTTGTTAATGCCAGCAGCAAGTATGAAATCACGACCATTCATAAT
CTCTTCCGTAAGCTGACTCATCGCCTCTTCAGGAGGAATTTTGGGTACACACTGCGGTCA
GTCAATGACCTTTATATCCAGAAGCAGTTTCCAATCCTGCTTGACTTCAAAACTAAAGTA
AGAGAGTATTACTTTGCTGAGGCCCAGATAGCTGACTTCTCAGACCCTGCCTTCATATCA
AAAACCAACAACCACATCATGAAGCTCACCAAGGGCCTCATAAAAGATGCTCTGGAGAAT
ATAGACCCTGCTACCCAGATGATGATTCTCAACTGCATCTACTTCAAAGGATCCTGGGTG
AATAAATTCCCAGTGGAAATGACACACAACCACAACTTCCGGCTGAATGAGAGAGAGGTA
GTTAAGGTTTCCATGATGCAGACCAAGGGGAACTTCCTCGCAGCAAATGACCAGGAGCTG
GACTGCGACATCCTCCAGCTGGAATACGTGGGGGGCATCAGCATGCTAATTGTGGTCCCA
CACAAGATGTCTGGGATGAAGACCCTCGAAGCGCAACTGACACCCCGGGTGGTGGAGAGA
TGGCAAAAAAGCATGACAAACAGAACTCGAGAAGTGCTTCTGCCGAAATTCAAGCTGGAG
AAGAACTACAATCTAGTGGAGTCCCTGAAGTTGATGGGGATCAGGATGCTGTTTGACAAA
AATGGCAACATGGCAGGCATCTCAGACCAAAGGATCGCCATCGACCTGTTCAAGCACCAA
GGCACGATCACAGTGAACGAGGAAGGCACCCAAGCCACCACTGTGACCACGGTGGGGTTC
ATGCCGCTGTCCACCCAAGTCCGCTTCACTGTCGACCGCCCCTTTCTTTTCCTCATCTAC
GAGCACCGCACCAGCTGCCTGCTCTTCATGGGAAGAGTGGCCAACCCCAGCAGGTCCTAG

Clone variation with respect to NM_000185.3
1446 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000185 unedited
TCAGGAATTTGTAATACGACTCACTTATAGGGCGGCCGCGAATTCGCACCAGGCCACTTC
TCAGAACACAGAGCTTTAGCTCCGCCAAAATGAAACACTCATTAAACGCACTTCTCATTT
TCCTCATCATAACATCTGCGTGGGGTGGGAGCAAAGGCCCGCTGGATCAGCTAGAGAAAG
GAGGGGAAACTGCTCAGTCTGCAGATCCCCAGTGGGAGCAGTTAAATAACAAAAACCTGA
GCATGCCTCTTCTCCCTGCCGACTTCCACAAGGAAAACACCGTCACCAACGACTGGATTC
CAGAGGGGGAGGAGGACGACGACTATCTGGACCTGGAGAAGATATTCAGTGAAGACGACG
ACTACATCGACATCGTCGACAGTCTGTCAGTTTCCCCGACAGACTCTGATGTGAGTGCTG
GGAACATCCTCCAGCTTTTTCATGGCAAGAGCCGGATCCAGCGTCTTAACATCCTCAACG
CCAAGTTCGCTTTCAACCTCTACCGAGTGCTGAAAGACCAGGTCAACACTTTCGATAACA
TCTTCATAGCACCCGTTGGCATTTCTACTGCGATGGGTATGATTTCCTTAGGTCTGAAGG
GAGAGACCCATGAACAAGTGCACTCGATTTTGCATTTTAAAGACTTTGTTAATGCCAGCA
GCAAGTATGAAATCACGACCATTCATAATCTCTTCCGTAAGCTGACTCATCGCCTCTTCA
GGAGGAATTTTGGGTACACACTGCGGTCAGTCAATGACCTTTATATCCAGAAGCAGTTTC
CAATCCTGCTTGACTTCAAACTAAGTAAGAGAGTATTACTNTGCTGAGGCCCAATAGCTG
ACTTCTCAGACCTGCCTTCTATCAAAACCACACCACATCTGAGCTCACAGGGCCTCTANA
GAGCTCTGAGATATAGACCTGCTACCAGAGATGATCTCACTGCTCACTTCAAGAACCTGG
TGA

3' Read Nucleotide Sequence:

```
>OriGene 3' read for NM_000185 unedited
TTACTTTGNACCCGCGGCCGCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTTAAAT
GTGGCTACATTTATTTATCTCTAGTATGGGAGACATGGCACACACTGTCCTCCAGGTCAC
AGGGAGGCAACAGCAGGAGGGACTGATGGCATTCATCATGGATTTGAAAGGTCAGGCTTT
GAGAAAATTAAGCCCTAACATTAGCCCAGGGCACCCCTCATATGTCTTGAGGTGGCTTCT
TCCCTGGACATCAAGAATGGTGCTAGTTGTGTACCCTCCTTGGGAGAGGTAAGGAATTAG
TCACACCACTCATTTCTGTGCTTGGTATTCAGATGAGGGGCCTGGTGGAGAAAGGCTTGA
GTGACAGAGTCAGGTGTGCAAGGATGGGGTCACCGGAGCGGGAGGTGCTTAGGACGCGCT
GCTCAGGTTTGCTGTGAAGAGTGGGGAGGTGAGACCCTCTAGGTAACAGCAGACACACTA
CAGTTACAGTGACTTCTATGAGCTTACAGCATGGGCTATTGTGCAGAATTGATTCCAACA
AGCCTCTCTTCTTGGTCGTTTCTAAGCTCCTCTCATATGGGCCTCGAATTCAGATTGGTA
GCGTAAACTACGTAAATGATGCCAGAACATCTCTGTTCTCGTTGTTGGAATGGAAACAAA
ATGAGGGTGCCCCCAAGGCACTTCAGACACCTAGACCTCCACCTCTAGGACCTGCTGGGG
GNTGGCCACTCTTCCCATGAAGAGCANGCAGCTGGTGCGGTGCTCGTAAATGAAGAAAAG
AAAGGGGCGGTCGACAGTGAAAGCGACTTNGGGTGGNACAGCGCATGAACCCCACCGTGG
TCACAGTGGGTGCCTGGGGTGCCNTTCTCGTTCACTGNGATCGTGCCTTGGTGCNTTGAC
AGNTCGATGGCGATCCTTTTGTCTGAGATGCCTGCATGTTGCCATTTTTGNCAAACACAT
CCTGATCCCATCACTTCGGGACTCACN
```

Restriction Sites: NotI-NotI

ACCN: NM_000185

Insert Size: 2290 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_000185.3, NP_000176.2

RefSeq Size: 2237 bp

RefSeq ORF: 1500 bp

Locus ID: 3053

UniProt ID: P05546

Cytogenetics: 22q11.21

Domains: SERPIN

Protein Families:	Druggable Genome
Protein Pathways:	Complement and coagulation cascades
Gene Summary:	This gene belongs to the serpin gene superfamily. Serpins play roles in many processes including inflammation, blood clotting, and cancer metastasis. Members of this family have highly conserved secondary structures with a reactive center loop that interacts with the protease active site to inhibit protease activity. This gene encodes a plasma serine protease that functions as a thrombin and chymotrypsin inhibitor. The protein is activated by heparin, dermatan sulfate, and glycosaminoglycans. Allelic variations in this gene are associated with heparin cofactor II deficiency. [provided by RefSeq, Jul 2015]