

Product datasheet for RC221292

Hepsin (HPN) (NM_182983) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hepsin (HPN) (NM_182983) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hepsin
Synonyms:	TMPRSS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221292 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCAGAAGGAGGGTGGCCGACTGTGCCATGCTGCTCCAGACCCAAGGTGGCAGCTCTCACTGCGG
GGACCTGCTACTTCTGACAGCCATCGGGGCGGCATCCTGGGCCATTGTGGCTGTCTCCTCAGGAGTGA
CCAGGAGCCGCTGTACCCAGTGCAGGTCAGCTCTCGGACGCTCGGCTCATGGTCTTTGACAAGACGGAA
GGGACGTGGCGGCTGCTGTCTCCTCGCGTCCAACGCCAGGGTAGCCGACTCAGTGCAGGAGATGG
GCTTCTCAGGGCACTGACCCACTCCGAGCTGGACGTGCGAACGGCGGGCCCAATGGCAGTCCGGCTT
CTTCTGTGTGGACGAGGGGAGGCTGCCCCACCCAGAGGCTGCTGGAGGTCATCTCCGTGTGTGATTGC
CCCAGAGGCCGTTTCTTGCCCGCATCTGCCAAGACTGTGGCCGACGGAAGCTGCCCGTGGACCGCATCG
TGGGAGGCCGGGACACCAGCTTGGGCCGGTGGCCGTGGCAAGTCAGCCTTCGCTATGATGGAGCACACCT
CTGTGGGGGATCCCTGCTCTCCGGGACTGGGTGCTGACAGCCGCCATTGCTTCCCGGAGCGGAACCGG
GTCCTGTCCCGATGGCGAGTGTTCGCCGTGCCGTGGCCAGGCCTCTCCCCACGGTCTGCAGTGGGGG
TGCAGGCTGTGGTCTACCACGGGGGCTATCTTCCCTTTCCGGACCCCAACAGCGAGGAGAACAGCAACGA
TATTGCCCTGGTCCACCTCTCCAGTCCCCTGCCCTCACAGAATACATCCAGCCTGTGTGCCTCCAGCT
GCCGGCCAGGCCCTGGTGGATGGCAAGATCTGTACCGTGACGGGCTGGGGCAACACGCACTATGGCC
AACAGGCCGGGGTACTCCAGGAGGCTCGAGTCCCATAATCAGCAATGATGTCTGCAATGGCGTGA
CTATGAAAACAGATCAAGCCCAAGATGTTCTGTGCTGGCTACCCGAGGGTGGCATTGATGCCTGCCAG
GGCGACAGCGGTGGTCCCTTTGTGTGTGAGGACAGCATCTCTCGGACGCCAGTTGGCGGCTGTGTGGCA
TTGTGAGTTGGGGCACTGGCTGTGCCCTGGCCAGAAGCCAGGCGTCTACACCAAAGTCAGTGACTTCCG
GGAGTGGATCTCCAGGCCATAAAGACTCACTCCGAAGCCAGCGCATGGTGACCCAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221292 protein sequence
Red=Cloning site Green=Tags(s)

MAQKEGGRTVPCCSRPKVAALTAGLLLLTAIGAASWAI VAVLLRSDQEPLYPVQVSSADARLMVFDKTE
 GTWRLLCSSRSNARVAGLSCEEMGFLRALTHSELDVRTAGANGTSGFFCVDEGRLPHTQRLLLEVISVDCDC
 PRGRFLAAICQDCGRRKLPVDRI VGGRTSLGRWPQVSLRYDGAHL CGGSLLSGDWVLTAAHCFPERNR
 VLSRWRVFA GAVAQASPHGLQLGVQAVVYHGGYLPFRDPNSEENSNDIALVHLSSPLPLTEYIQPVCLPA
 AGQALVDGKICTVTGWGNTQYYGQQAGVLQEARVPIISNDVCNGADFYGNQIKPKMFCAGYPEGGIDACQ
 GDSGGPFVCEDSISRTPRWRLCGIVSWGTCALAQKPGVYTKVSDFREWIFQAIKTHSEASGMVTQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6328_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_182983

ORF Size: 1251 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_182983.2](#), [NP_892028.1](#)

RefSeq Size: 2389 bp

RefSeq ORF: 1254 bp

Locus ID: 3249

UniProt ID: [P05981](#)

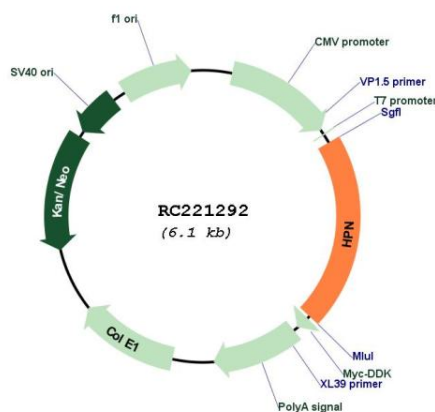
Cytogenetics: 19q13.11

Protein Families: Druggable Genome, Protease, Transmembrane

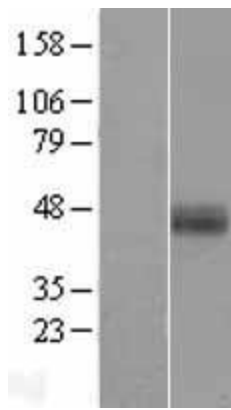
MW: 45 kDa

Gene Summary: This gene encodes a type II transmembrane serine protease that may be involved in diverse cellular functions, including blood coagulation and the maintenance of cell morphology. Expression of the encoded protein is associated with the growth and progression of cancers, particularly prostate cancer. The protein is cleaved into a catalytic serine protease chain and a non-catalytic scavenger receptor cysteine-rich chain, which associate via a single disulfide bond. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]

Product images:



Circular map for RC221292



Western blot validation of overexpression lysate (Cat# [LY405297]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221292 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).