

Product datasheet for **RG216534**

HPSE2 (NM_021828) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HPSE2 (NM_021828) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HPSE2
Synonyms:	HPA2; HPR2; UFS; UFS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG216534 representing NM_021828
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGGTCTTTGTGCCTTCCCTGAAGCCATGCCTCCAGCAACTCCCGCCCCCGCGTGCCTAGCCC
 CGGGGCTCTCTACTTGGCTCTGTTGCTCCATCTCTCCCTTCTCCAGGCTGGAGACAGGAGACCCTT
 GCCTGTAGACAGAGCTGCAGTTTGAAGAAAAGACCCTGATTCTACTTGATGTGAGCACCAAGAACCCA
 GTCAGGACAGTCAATGAGAACTTCTCTCTGACGCTGGATCCGTCATCATTGATGATGGCTGGCTCG
 ATTTCTAAGCTCCAAGCGCTTGGTGACCTGGCCGGGGACTTTCGCCCGCTTCTGCGCTTCGGGGG
 CAAAAGGACCGACTTCTGCAGTCCAGAACCTGAGGAACCCGGCGAAAAGCCGCGGGGGCCCGGGCCC
 GATTACTATCTCAAAAATATGAGGATGACATTGTTGAAAGTATGTTGCCTTAGATAAACAGAAAGGCT
 GCAAGATTGCCAGCACCTGATGTTATGCTGGAGCTCAAAGGGAGAAGGCAGCTCAGATGCATCTGGT
 TCTTCTAAAGGAGCAATTCTCAATACTTACAGTAATCTCATATTAACAGCCAGGCTCTAGACAAACTT
 TATAACTTTGCTGATTGCTCTGGACTCCACCTGATATTTGCTCTAAATGCACTGCGTCGTAATCCCAATA
 ACTCTGGAACAGTTCTAGTGCCCTGAGTCTGTTGAAGTACAGCGCCAGCAAAAAGTACAACATTTCTTG
 GAACTGGGTAATGAGCCAAATAACTATCGGACCATGCATGGCCGGGAGTAAATGGCAGCCAGTTGGGA
 AAGGATTACATCCAGCTGAAGAGCCTGTTGACGCCATCCGGATTTATCCAGAGCCAGCTTATATGGCC
 CTAATATTGGGCGCCGAGGAAGAATGCATCGCCCTCTAGATGGATTCATGAAGGTGGCAGGAAGTAC
 AGTAGATGCAGTTACCTGGCAACATTGCTACATTGATGGCCGGTGGTCAAGGTGATGGACTTCTGAAA
 ACTCGCTGTTAGACACACTCTGACCAGATTAGGAAAATTAGAAAAGTGGTTAATACATACACTCCAG
 GAAAGAAGATTTGGCTTGAAGGTGGTGACCACCTCAGCTGGAGGCACAACAATCTATCCGATTCCTA
 TGCTGCAGGATTCTTATGGTTGAACACTTTAGGAATGCTGGCCAATCAGGGCATTGATGTCGTGATACGG
 CACTCATTTTTGACCATGGATAACAATCACCTCGTGGACCAGAATTTTAAACCATTACCAGACTACTGGC
 TCTCTCTCTCTACAAGCGCCTGATCGGCCCAAAGTCTTGGCTGTGCATGTGGCTGGGCTCCAGCGGAA
 GCCACGGCCTGGCCGAGTATCCGGGACAACTAAGGATTTATGCTCACTGCACAAACCACCACAACCAC
 AACTACGTTCTGGGTCCATTACACTTTTTATCATCAACTTGCATCGATCAAGAAAGAAAATCAAGCTGA
 CTGGGACTCTCAGAGACAAGCTGGTTCACCAGTACCTGCTGCAGCCCTATGGGCAGGAGGGCTAAAGTC
 CAAGTCAGTGAACCTGAATGGCCAGCCCTTAGTGATGGTGGACGACGGGACCCTCCAGAATTGAAGCCC
 CGCCCCCTTCGGCCGGCCGGACATTGGTCATCCCTCCAGTCACCATGGGCTTTTTTGTGGTCAAGAATG
 TCAATGCTTTGGCTGCCCTACCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG216534 representing NM_021828
 Red=Cloning site Green=Tags(s)

MRVLCAFPEAMPSSNSRPPACLAPGALYLALLLHLSLSSQAGDRRPLPVDRAAGLKEKTLILLDVSTKNP
 VRTVNFENFLSLQLDPSIIHDGWLDFLSSKRLVTLARGLSPAFLRFGGKRTDFLQFQNLRNPAKSRGGPGP
 DYYLKNYEDDIVRSDVALDKQKCKIAQHPDVMLELQREKAAQMHLLVLLKEQFSNTYSNLILTARSLDKL
 YNFADCSGLHLIFALNALRRNPNSWNSSALSLLKYSASKKYNISWELGNEPNNYRTMHGRAVNGSQLG
 KDYIQLKSLLPQIRIYSRASLYGPNIGRPRKNVIALLDGFMKVAGSTVDAVTWQHICYIDGRVVKVMDFLK
 TRLLDTLSDQIRKIQKVNTYTPGKKIWLEGVVTTAGGTTNLSDSYAAGFLWNLGMLANQIDVVIR
 HSFFDHGYNHLVDQNFNPLPDYWL SLLYKRLIGPKVLAVHVAGLQRKPRPGRVIRDKLR IYAHCTNHHNH
 NYVRGSITLFIINLHRSRKKIKLTGTLRDKLVHQYLLQPYGQEGLKSKSVQLNGQPLVMVDDGTLPELKP
 RPLRAGR TLVIPPVTMGFFVVKVNVNALACRYR

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_021828

ORF Size: 1776 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_021828.3](#), [NP_068600.3](#)

RefSeq Size: 2293 bp

RefSeq ORF: 1779 bp

Locus ID: 60495

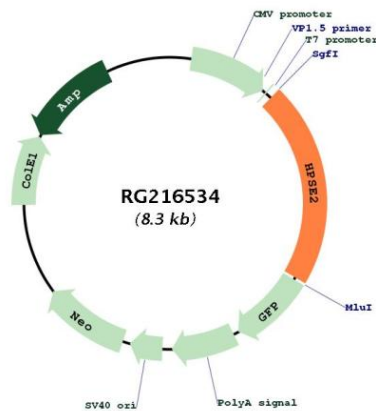
UniProt ID: [Q8WWQ2](#)

Cytogenetics: 10q24.2

Protein Pathways: Glycosaminoglycan degradation, Metabolic pathways

Gene Summary: This gene encodes a heparanase enzyme. The encoded protein is a endoglycosidase that degrades heparin sulfate proteoglycans located on the extracellular matrix and cell surface. This protein may be involved in biological processes involving remodeling of the extracellular matrix including angiogenesis and tumor progression. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RG216534