

## Product datasheet for **RG230242**

### HPSE2 (NM\_001166244) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HPSE2 (NM_001166244) 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:**

>RG230242 representing NM\_001166244  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGGGTGTCTTGTGCCTTCCCTGAAGCCATGCCTCCAGCACTCCCGCCCCCGCGTGCCTAGCCC  
 CGGGGCTCTCTACTTGGCTCTGTTGCTCCATCTCTCCCTTCTCCAGGCTGGAGACAGGAGACCCTT  
 GCCTGTAGACAGAGCTGCAGTTTGAAGGAAAAGACCCTGATTCTACTTGATGTGAGCACCAGAACCCCA  
 GTCAGGACAGTCAATGAGAACTTCTCTCTGACGCTGGATCCGTCCATCATTGATGATGGCTGGCTCG  
 ATTTCTAAGCTCCAAGCGCTTGGTGACCTGGCCGGGGACTTTCGCCCGCTTCTGCGCTTCGGGGG  
 CAAAAGGACCGACTTCTGCAGTCCAGAACCTGAGGAACCCGGCGAAAAGCCGCGGGGGCCCGGGCCCG  
 GATTACTATCTCAAAAATATGAGGATGACATTGTTTGAAGTATGTTGCCTTAGATAAACAGAAAGGCT  
 GCAAGATTGCCAGCACCTGATGTTATGCTGGAGCTCAAAGGGAGAAGGCAGCTCAGATGCATCTGGT  
 TCTTCTAAAGGAGCAATTCTCCAATACTACAGTAATCTCATATTAACAGAGCCAATAACTATCGACC  
 ATGCATGGCCGGCAGTAAATGGCAGCCAGTTGGGAAAGGATTACATCCAGCTGAAGAGCCTGTTGCAGC  
 CCATCCGATTTATTCCAGAGCCAGCTTATATGGCCCTAATATTGGGCGGCCGAGGAAGAATGTCATCGC  
 CCTCTAGATGGATTCATGAAGGTGGCAGGAAGTACAGTATGACAGTTACCTGGCAACATTGCTACATT  
 GATGGCCGGTGGTCAAGGTGATGGACTTCTGAAAACCTGCCTGTTAGACACACTCTCTGACCAGATTA  
 GGAAAATTCAGAAAGTGGTTAATACATAACTCCAGGAAAAGAAGATTTGGCTTGAAGGTGGTGGACAC  
 CTCAGCTGGAGGCACAAACATCTATCCGATTCCTATGCTGCAGGACTTCTATGGTTGAACACTTTAGGA  
 ATGCTGGCCAATCAGGGCATTGATGTCGTGATACGGCACTCATTTTTGACCATGGATACAATCACCTCG  
 TGGACCAATTTAACCATTACCAGACTACTGGCTCTCTCTCTACAAGCGCTGATCGGCCCAA  
 AGTCTTGGCTGTGCATGTGGCTGGCTCCAGCGAAGCCACGGCCTGGCCGAGTGATCCGGGACAACTA  
 AGGATTTATGCTCACTGCACAAACCACCAACCAACTACGTTTCGTGGTCCATTACACTTTTTATCA  
 TCAACTTGCATCGATCAAGAAAGAAAATCAAGCTGGCTGGGACTCTCAGAGACAAGCTGGTTCACCAGTA  
 CCTGCTGCAGCCCTATGGGCAGGAGGCCCTAAAGTCCAAGTCAGTGAACCTGAATGGCCAGCCCTTAGTG  
 ATGGTGGACGACGGACCCTCCAGAATTGAAGCCCCGCCCTTCGGGCCGGCCGACATTGGTCATCC  
 CTCAGTACCATGGCTTTTATGTGGTCAAGAATGTCAATGCTTTGGCCTGCCCTACCGA

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG230242 representing NM\_001166244  
 Red=Cloning site Green=Tags(s)

MRVLCAPPEAMPSSNSRPPACLAPGALYLALLHLSSLQAGDRRPLPVDRAAGLKEKTLILLDVSTKNP  
 VRTVNFNLSLQLDPSIIHDGWLDFLSSKRLVTLARGLSPAFLRFGGKRTDFLQFQNLNRPKSRGGPGP  
 DYYLKNYEDDIVRSDVALDKQKQCKIAQHPDVMLELQREKAAQMHLLVLLKEQFSNTYSNLIILTEPNRYR  
 MHGRAVNGSQLGKDYIQLKSLQPIRIYSRASLYGPNIGRPRKNVIALLDGFMKVAGSTVDAVTWQHICYI  
 DGRVVKVMDFLKTRLLDTLSDQIRKIQKVVNTYTPGKKIWLEGVVTTASGGTNNLSDSYAAGFLWLNTLG  
 MLANQIDVIVIRHSFFDHGYNHLVDQNFNPLPDYWL SLLYKRLIGPKVLAVHVAGLQRKPRPGRVIRDKL  
 RIYAHCTNHHNHNHYVRSITLFIINLHRSRKKIKLAGTLRDKLVHQYLLQPYGQEGLSKSVQLNGQPLV  
 MVDDGTLPELKPRLRAGRTLVIPTVMGFYVVKVNVNALACRYR

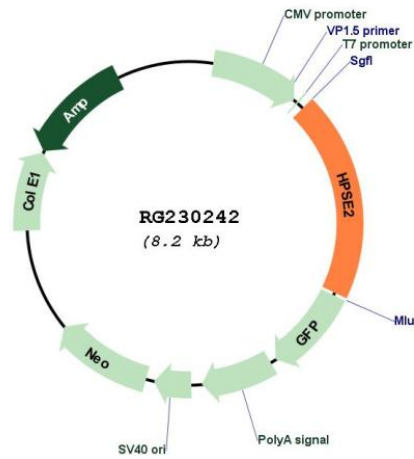
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:


**Plasmid Map:**


<b>ACCN:</b>	NM_001166244
<b>ORF Size:</b>	1602 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001166244.1</a> , <a href="#">NP_001159716.1</a>
<b>RefSeq Size:</b>	4175 bp
<b>RefSeq ORF:</b>	1605 bp
<b>Locus ID:</b>	60495
<b>UniProt ID:</b>	<a href="#">Q8WWQ2</a>
<b>Cytogenetics:</b>	10q24.2
<b>Protein Pathways:</b>	Glycosaminoglycan degradation, Metabolic pathways
<b>Gene Summary:</b>	This gene encodes a heparanase enzyme. The encoded protein is an 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]