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Product datasheet for RC208556

Heparanase 1 (HPSE) (NM_006665) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Heparanase 1 (HPSE) (NM_006665) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Heparanase 1
Synonyms:	HPA; HPA1; HPR1; HPSE1; HSE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208556 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCTGCGCTCGAAGCCTGCGCTGCCGCCGCCGCTGATGCTGCTGCTCCTGGGGCCGCTGGGTCCCC
TCTCCCCTGGCGCCCTGCCCCGACCTGCGCAAGCACAGGACGTCGTGGACCTGGACTTCTTCACCCAGGA
GCCGCTGCACCTGGTGAGCCCCTCGTTCCTGTCCGTCACCATTGACGCCAACCTGGCCACGGACCCGCGG
TTCCTCATCCTCCTGGGTTCTCCAAAGCTTCGTACCTTGGCCAGAGGCTTGTCTCCTGCGTACCTGAGGT
TTGGTGGCACCAAGACAGACTTCCTAATTTTCGATCCCAAGAAGGAATCAACCTTTGAAGAGAGAAGTTA
CTGGCAATCTCAAGTCAACCAGGATATTTGCAAATATGGATCCATCCCTCCTGATGTGGAGGAGAAGTTA
CGGTTGGAATGGCCCTACCAGGAGCAATTGCTACTCCGAGAACACTACCAGAAAAAGTTCAAGAACAGCA
CCTACTCAAGAAGCTCTGTAGATGTGCTATACACTTTTGCAAACTGCTCAGGACTGGACTTGATCTTTGG
CCTAAATGCGTTATTAAGAACAGCAGATTTGCAGTGGAACAGTTCTAATGCTCAGTTGCTCCTGGACTAC
TGCTCTTCCAAGGGGTATAACATTTCTTGGGAACTAGGCAATGAACCTAACAGTTTCCTTAAGAAGGCTG
ATATTTTCATCAATGGGTCGCAGTTAGGAGAAGATTTTATTCAATTGCATAAACTTCTAAGAAAGTCCAC
CTTCAAAAATGCAAAACTCTATGGTCCTGATGTTGGTCAGCCTCGAAGAAAGACGGCTAAGATGCTGAAG
AGCTTCCTGAAGGCTGGTGGAGAAGTGATTGATTCAGTTACATGGCATCACTACTATTTGAATGGACGGA
CTGCTACCAGGGAAGATTTTCTAAACCCTGATGTATTGGACATTTTTATTTCATCTGTGCAAAAAGTTTT
CCAGGTGGTTGAGAGCACCAGGCCTGGCAAGAAGGTCTGGTTAGGAGAAACAAGCTCTGCATATGGAGGC
GGAGCGCCCTTGCTATCCGACACCTTTGCAGCTGGCTTTATGTGGCTGGATAAATTGGGCCTGTCAGCCC
GAATGGGAATAGAAGTGGTGATGAGGCAAGTATTCTTTGGAGCAGGAAACTACCATTTAGTGGATGAAAA
CTTCGATCCTTTACCTGATTATTGGCTATCTCTTCTGTTCAAGAAATTGGTGGGCACCAAGGTGTTAATG
GCAAGCGTGCAAGGTTCAAAGAGAAGGAAGCTTCGAGTATACCTTCATTGCACAAACACTGACAATCCAA
GGTATAAAGAAGGAGATTTAACTCTGTATGCCATAAACCTCCATAATGTCACCAAGTACTTGCGGTTACC
CTATCCTTTTTCTAACAAGCAAGTGGATAAATACCTTCTAAGACCTTTGGGACCTCATGGATTACTTTCC
AAATCTGTCCAACTCAATGGTCTAACTCTAAAGATGGTGGATGATCAAACCTTGCCACCTTTAATGGAAA
AACCTCTCCGGCCAGGAAGTTCACTGGGCTTGCCAGCTTTCTCATATAGTTTTTTTGTGATAAGAAATGC
CAAAGTTGCTGCTTGCATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208556 protein sequence
Red=Cloning site Green=Tags(s)

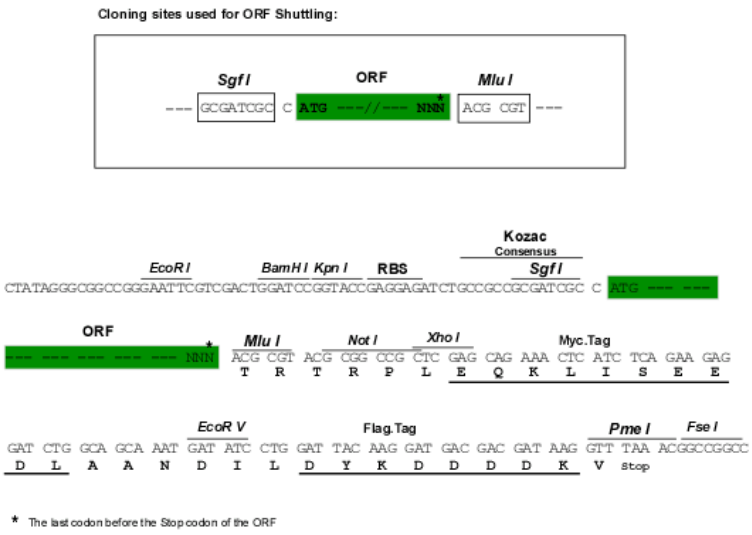
MLLRSKPALPPPLMLLLLGPLGPLSPGALPRPAQAQDVVDLDFFTQEPLHLVSPSFLSVTIDANLATDPR
FLILLGSPKLRTLARGLSPAYLRFGGTKTDFLIFDPKKESTFEERSYWQSQVNQDICKYGSIPPDVEEKL
RLEWPYQEQLLLREHYQKKFKNSTYSRSSVDVLYTFANCSGLDLIFGLNALLRTADLQWNSSNAQLLLDY
CSSKGYNISWELGNEPNSFLKKADIFINGSQLGEDFIQLHKLLRKSTFKNAKLYGPDVGQPRRKTAKMLK
SFLKAGGEVIDSVTWHHYYLNGRTATREDFLNPDVLDIFISSVQKVFQVVESTRPGKKVWLGETSSAYGG
GAPLLSDTFAAGFMWLDKLGLSARMGIEVVMRQVFFGAGNYHLVDENFDPLPDYWLSLLFKKLVGTKVLM
ASVQGSKRRKLRVYLHCTNTDNPRYKEGDLTLYAINLHNVTKYLRLPYPFSNKQVDKYLLRPLGPHGLLS
KSVQLNGLTLKMVDDQTLPPLMEKPLRPGSSLGLPAFSYSFFVIRNAKVAACI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6149_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006665

ORF Size: 1629 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_006665.2, NP_006656.1

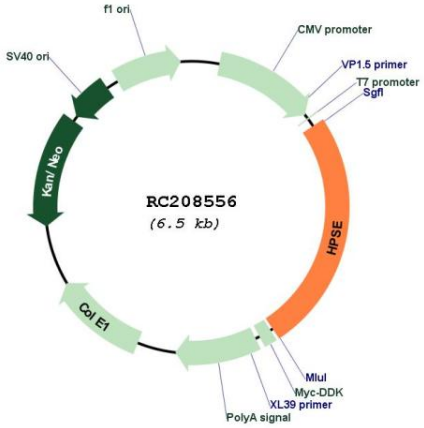
RefSeq Size: 4668 bp

RefSeq ORF: 1632 bp

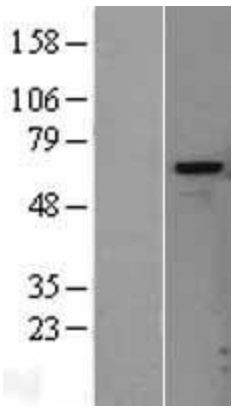
Locus ID: 10855

UniProt ID:	Q9Y251
Cytogenetics:	4q21.23
Domains:	Glyco_hydro_79n
Protein Families:	Secreted Protein
Protein Pathways:	Glycosaminoglycan degradation, Metabolic pathways
MW:	61.2 kDa
Gene Summary:	Heparan sulfate proteoglycans are major components of the basement membrane and extracellular matrix. The protein encoded by this gene is an enzyme that cleaves heparan sulfate proteoglycans to permit cell movement through remodeling of the extracellular matrix. In addition, this cleavage can release bioactive molecules from the extracellular matrix. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

Product images:



Circular map for RC208556



Western blot validation of overexpression lysate (Cat# [LY420636]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219659] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).