

Product datasheet for RC230203L3

OriGene Technologies, Inc.

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Hyaluronidase PH20 (SPAM1) (NM_001174045) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Hyaluronidase PH20 (SPAM1) (NM 001174045) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Hyaluronidase PH20

Synonyms: HEL-S-96n; HYA1; HYAL1; HYAL3; HYAL5; PH-20; PH20; SPAG15

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC230203).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_001174045

ORF Size: 1527 bp



Hyaluronidase PH20 (SPAM1) (NM_001174045) Human Tagged Lenti ORF Clone - RC230203L3

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 001174045.1, NP 001167516.1

RefSeq Size: 2236 bp RefSeq ORF: 1530 bp Locus ID: 6677 **UniProt ID:** P38567

Cytogenetics:

7q31.32 **Protein Families:** Druggable Genome, Transmembrane

Protein Pathways: Glycosaminoglycan degradation, Metabolic pathways

MW: 57.8 kDa

Gene Summary: Hyaluronidase degrades hyaluronic acid, a major structural proteoglycan found in

> extracellular matrices and basement membranes. Six members of the hyaluronidase family are clustered into two tightly linked groups on chromosome 3p21.3 and 7q31.3. This gene was previously referred to as HYAL1 and HYA1 and has since been assigned the official symbol SPAM1; another family member on chromosome 3p21.3 has been assigned HYAL1. This gene encodes a GPI-anchored enzyme located on the human sperm surface and inner acrosomal membrane. This multifunctional protein is a hyaluronidase that enables sperm to penetrate through the hyaluronic acid-rich cumulus cell layer surrounding the oocyte, a receptor that plays a role in hyaluronic acid induced cell signaling, and a receptor that is involved in sperm-zona pellucida adhesion. Abnormal expression of this gene in tumors has implicated this protein in degradation of basement membranes leading to tumor invasion and metastasis. Multiple transcript variants encoding different isoforms have been found for

this gene. [provided by RefSeq, Mar 2010]