

Product datasheet for SC333875

OriGene Technologies, Inc.

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Protamine 2 (PRM2) (NM_001286356) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Protamine 2 (PRM2) (NM_001286356) Human Untagged Clone

Tag: Tag Free

Symbol: Protamine 2

Synonyms: CT94.2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC333875 representing NM_001286356.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGCCCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM_001286356

Insert Size: 423 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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.

RefSeg: NM 001286356.1

 RefSeq Size:
 727 bp

 RefSeq ORF:
 423 bp

 Locus ID:
 5620

 UniProt ID:
 P04554

 Cytogenetics:
 16p13.13

 MW:
 17.1 kDa

Gene Summary:

Protamines substitute for histones in the chromatin of sperm during the haploid phase of spermatogenesis, and are the major DNA-binding proteins in the nucleus of sperm in many vertebrates. They package the sperm DNA into a highly condensed complex in a volume less than 5% of a somatic cell nucleus. Many mammalian species have only one protamine (protamine 1); however, a few species, including human and mouse, have two. This gene encodes protamine 2, which is cleaved to give rise to a family of protamine 2 peptides. Alternatively spliced transcript variants have also been found for this gene. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (2) uses an alternate acceptor splice site at the last exon that causes a frameshift compared to variant 1. The resulting isoform (2) has a longer and distinct C-terminus compared to isoform 1.