

### **Product datasheet for RC235810**

### OriGene Technologies, Inc.

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## Protamine 2 (PRM2) (NM\_001286358) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Protamine 2 (PRM2) (NM\_001286358) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Protamine 2

Synonyms: CT94.2

Mammalian Cell Neomycin

Selection:

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

ORF Nucleotide >RC235810 representing NM\_001286358
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ATGGTCCGATACCGCGTGAGGAGCCTGAGCGAACGCTCGCACGAGGTGTACAGGCAGCAGTTGCATGGGC
AAGAGCAAGGACACCACGGCCAAGAGGAGCAAGGGCTGAGCCCGGAGCACGTCGAGGTCTACGAGAGGAC
CCATGGCCAGTCTCACTATAGGCGCAGACACTGCTCTCGAAGGAGGCTGCACCGGATCCACAGGCGGCAG
CATCGCTCCTGCAGAAGGCGCAAAAGACGCTCCTGCAGGCACCGGAGGAGGCATCGCAGAGAACCAGGAA
GAGAACATGCAGAAGGCACTAAGCTTCCTGGGCCCCTCACCCCCAGCTGGAAATTAAGAAAAAAGTCGCCC
GAAACACCAAGTGAGGCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA** 

Protein Sequence: >RC235810 representing NM\_001286358

Red=Cloning site Green=Tags(s)

MVRYRVRSLSERSHEVYRQQLHGQEQGHHGQEEQGLSPEHVEVYERTHGQSHYRRRHCSRRRLHRIHRRQ

HRSCRRKRRSCRHRRRHRREPGREHAEGTKLPGPLTPSWKLRKSRPKHQVRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

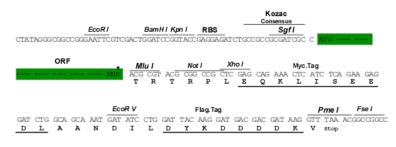
Restriction Sites: Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 001286358

ORF Size: 369 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: <u>NM 001286358.2</u>

**RefSeq Size:** 676 bp



 RefSeq ORF:
 372 bp

 Locus ID:
 5620

 UniProt ID:
 P04554

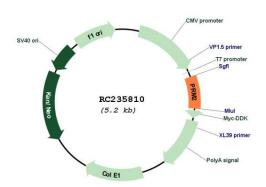
 Cytogenetics:
 16p13.13

 MW:
 15.7 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]

# **Product images:**



Circular map for RC235810