

Product datasheet for **RC201672**

PRMT7 (NM_019023) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	PRMT7
Synonyms:	SBIDDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC201672 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

 ATGAAGATCTTCTGCAGTCGGGCCAATCCGACCACGGGTCTGTGGAGTGGCTGGAGGAGGATGAACACT
ATGATTACCACCAGGAGATTGCAAGGTCATCTTATGCAGATATGCTACATGACAAAGACAGAAATGTAAA
ATACTACCAAGGTATCCGGGCTGCCGTGAGCAGGGTGAAGGACAGAGGACAGAAGGCCTTGGTTCTCGAC
ATTGGCACTGGCACGGGACTCTTGTCAATGATGGCGGTACAGCAGGTGCCGACTTCTGCTATGCCATCG
AGGTTTTCAAGCCTATGGCTGATGCTGTGAAGATTGTGGAGAAAAATGGCTTTAGTGATAAGATTAA
GGTTATCAACAAGCATTCCACCGAGGTGACTGTAGGTCCAGAGGGTGACATGCCATGCCGTGCCAACATC
CTGGTCACAGAGTTGTTTGACACAGAGCTGATCGGGGAGGGGGCGCTGCCCTCCTATGAGCACGCACACA
GGCATCTCGTGGAGGAAAATTGTGAGGCCGTGCCCCACAGAGCCACCGTCTATGCACAGCTGGTGGAGTC
CGGGAGGATGTGGTCGTGGAACAAGCTATTTCCCATCCAGTGCAGACCAGCCTCGGAGAGCAGGTATC
GTCCCTCCCGTTGACGTGGAGAGCTGCCCTGGCGCACCTCTGTCTGTGACATTAGCTGAACCAAGTGT
CACCAGCCGACTTTACAGTCCTCAGCGATGTGCTGCCCATGTTACAGCATAGACTTCAGCAAGCAAGTCAG
TAGCTCAGCAGCTGCCATAGCAGGCGGTTGAACCTCTGACATCTGGCCGAGCTCAGGTGGTTCTCTCG
TGGTGGGACATTGAAATGGACCCTGAGGGGAAGATCAAGTGCACCATGGCCCCCTTCTGGGCACACTCAG
ACCCAGAGGAGATGCAGTGGCGGGACCACTGGATGCAGTGTGTACTTCTGCCACAAGAGGAGCCTGT
GGTGCAGGGCTCAGCGCTCTATCTGGTAGCCACACGATGACTACTGCGTATGGTACAGCCTGCAGAGG
ACCAGCCCTGAAAAGAAATGAGAGAGTCCGCCAGATGCCCCCGTGTGTGACTGCCAGGCTCACCTGCTCT
GGAACCGCCCTCGGTTTGGAGAGATCAATGACCAGGACAGAACTGATCGATACGTCCAGGCTCTGAGGAC
CGTGCTGAAGCCAGACAGCGTGTGCTGTGTGTCAGCGATGGCAGCCTGCTCTCCGTGCTGGCCCATCAC
CTGGGGGTGGAGCAGGTGTTTACAGTCGAGAGTTCAGCAGCTTCTCAGAACTGTTGAGAAAAATCTTCA
AGGCTAACCCTTGAAGATAAAATTAACATCATAGAGAAACGGCCGGAATTATTAACAAATGAGGACCT
ACAGGGCAGAAAGGTCTCTCTCCTCGGGCGAGCCGTTCTTCACTACCAGCCTGCTGCCGTGGCACAAC
CTCTACTTCTGGTACGTGCGGACCGCTGTGGACCAGCACCTGGGGCCAGGTGCCATGGTGTATGCCCCAGG
CAGCCTCGCTGCACGCTGTGGTTGTGGAGTTCAGGGACCTGTGGCGGATCCGAGCCCTGTGGTACTG
CGAAGGCTTCGACGTGCACATCATGGACGACATGATTAAGCGTGCCCTGGACTTCAGGGAGAGCAGGGAA
GCTGAGCCCCACCGCTGTGGGAGTACCATGCCGCAGCCTCTCCGAGCCCTGGCAGATCCTGACCTTTG
ACTTCCAGCAGCCGGTGCCCTGCAGCCCTGTGTGCCGAGGGCACTGTGGAGCTCAGAAGGCCCGGGCA
GAGCCACGCAGCGGTGCTATGGATGGAGTACCACCTGACCCCGGAGTGCACGCTCAGCACTGGCCTCCTG
GAGCCTGCAGACCCCGAGGGGGGCTGCTGCTGGAACCCCACTGCAAGCAGGCCGTCTACTTCTTCAGCC
CTGCCCCAGATCCCAGAGCACTGCTGGGTGGCCACGGAAGTGTGAGTATGCAGTGGAGTTTACCCCGA
CACAGGCGACATCATATGGAGTTCAGGCATGCAGATACCCAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201672 protein sequence
 Red=Cloning site Green=Tags(s)

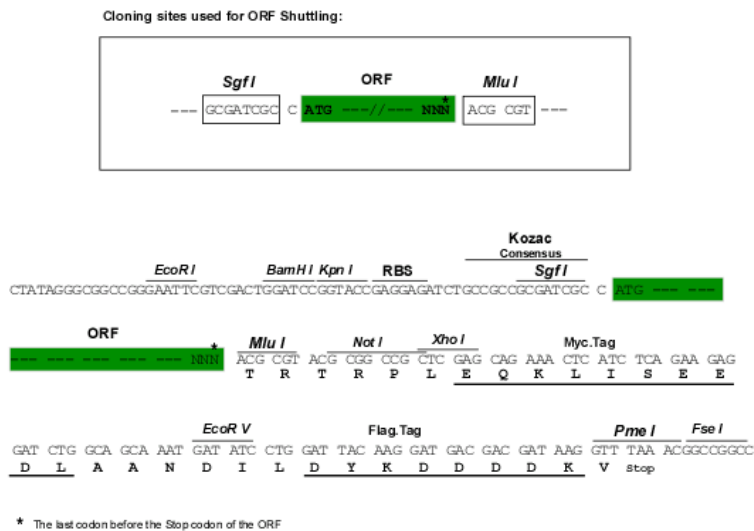
MKIFCSRANPTTGSVEWLEEDHYDHEIARSSYADMLHDKDRNVKYYQGIRAAVSRVKDRGQKALVLD
 IGTGTGLLSMMAVTAGADFCYAEVFKPMADAADVIVEKNGFSDKIKVINKHSTEVTVGPEGDMPCRANI
 LVTELFDTTELIGEGALPSYEHHRHLVEENCEAVPHRATVYAQLVESGRMWSWNKLFPIHVQTSLEQVI
 VPPVDVESCPCGAPSVCDIQLNQVSPADFTVLSDVLPMSIDFSKQVSSSAACHSRRFEPLTSGRAQVVL
 WWDIEMDPEGKIKCTMAPFWAHSDEEMQWRDHWMQCVYFLPQEEPVVQGSALYLVAHHDDYCVWYSLQR
 TSPEKNERVRQMRPVCDCAHLLWNRPRFGEINDQDRTDRYVQALRTVLKPDVCLCVSDGSLLSVLAHH
 LGVEQVFTVESSAASHKLLRKIFKANHLEDKINIEKRPELLTNEDLQGRKVSLLLGEFFTTSLLPWHN
 LYFWYVRTAVDQHLGPGAMVMPQAASLHVVVEFRDLWRIRSPCGDCEGFDVHIMDDMIKRALDFRESRE
 AEPHPLWEYPCRSLEPWQILTFDFQQPVLQPLCAEGTVELRRPGQSHAAVLWMEYHLTPECTLSTGLL
 EPADPEGGCCWNPCHKQAVYFFSPADPRALLGGPRTVSYAVEFHPDTGDIIMEFRHADTPD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6004_d10.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_019023

ORF Size: 2076 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_019023.5](#)

RefSeq Size: 2478 bp

RefSeq ORF: 2079 bp

Locus ID: 54496

UniProt ID: [Q9NVM4](#)

Cytogenetics: 16q22.1

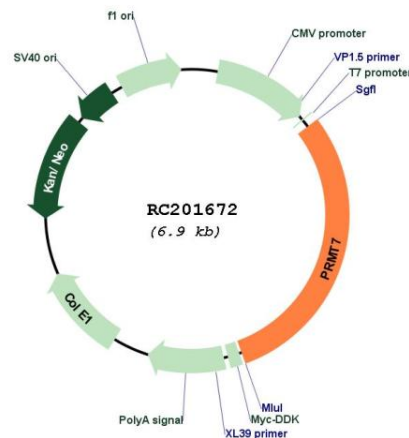
Protein Families: Druggable Genome

MW: 78.5 kDa

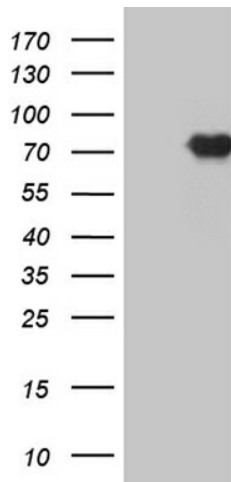
Gene Summary:

This gene encodes a member of the protein arginine N-methyltransferase family of proteins. The encoded enzyme transfers single methyl groups to arginine residues to generate monomethylarginines on histone proteins as well as other protein substrates. This enzyme plays a role in a wide range of biological processes, including neuronal differentiation, male germ line imprinting, small nuclear ribonucleoprotein biogenesis, and regulation of the Wnt signaling pathway. Mutations in this gene underlie multiple related syndromes in human patients characterized by intellectual disability, short stature and other features. The encoded protein may promote breast cancer cell invasion and metastasis in human patients. [provided by RefSeq, May 2017]

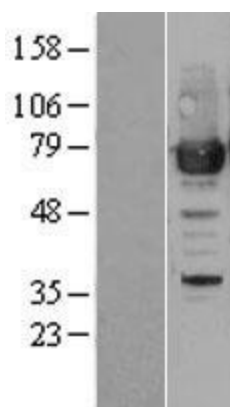
Product images:



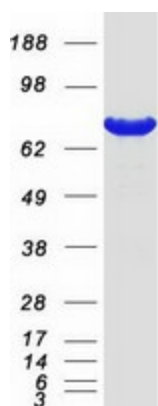
Circular map for RC201672



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRMT7 (Cat# RC201672, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRMT7 (Cat# [TA809927])(1:2000). Positive lysates [LY402728] (100ug) and [LC402728] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402728]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201672 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRMT7 protein (Cat# [TP301672]). The protein was produced from HEK293T cells transfected with PRMT7 cDNA clone (Cat# RC201672) using MegaTran 2.0 (Cat# [TT210002]).