

## Product datasheet for **MR225616**

### Prom1 (NM\_001163578) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prom1 (NM_001163578) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prom1
Synonyms:	4932416E19Rik; AC133; CD133; Prom; Prom-1; Proml1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR225616 representing NM\_001163578  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCTCTCGTCTTCAGTGCCCTGCTGTTACTGGGGCTGTGTGGAAGATCTCTTCAAGGTCAGCCTG  
 CATTCCATAACACTCCTGGGGCTATGAATTATGAATTGCCTACCACCAAATATGAGACCCAAGATACCTT  
 CAATGCTGGGATTGTTGGCCCTCTCTACAAAATGGTGACATCTTCTCAACGTGGTCCAGCCGAATGAC  
 TTCCCTCTAGATTTGATCAAAAACTCATACAGAACAAGAAGCTTTGACATCTCAGTTGATTTCCAAGGAGA  
 TTGCCCTCTATGAGATCGGAGTCTTATCTGCGCCATCCTGGGACTGCTGTTTATTATCCTCATGCCTCT  
 GGTGGGCTGCTTCTTTTGTATGTGCCGTTGCTGCAACAAATGCGGCGGAGAGATGCACCAGCGGCAGAAG  
 CAGAATGCGCCATGCAGGAGGAAGTCTTGGCCCTCTCCCTCTGGTATTTGTCTGCTCATGAGCCTTG  
 GCATTATATATGGCTTTGTGGCTAACCAGCAGACCAGGACTCGGATCAAAGGGACCCAGAAACTGGCAA  
 GAGCAATTTAGAGACTTTCAAACACTCCTGACTGAAACACCAAAGCAAATTTGACTATGTAGTGGAGCAG  
 TACACCAACACCAAGAACAAGGCATTCTCAGACCTGGATGGCATCGGCTCCGTGCTGGGAGGCAGATAA  
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 ACCAACCTGAGCTCTGTGAGAAACAGCATCGAGAATTCGCTCAGCAGCAGTACTGTACCTCAGATCCAG  
 CCAGCAAGATCTGCGATAGCATCAGACCAAGCCTAAGCAGTCTGGGGAGCAGCCTCAATTCAGTCAGCT  
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 AAGGGGTATACGACAATTGATGAAATACCAATACAATACAAAACCAAAGTACTGGATGTCATCAAAGACG  
 TCAAAAATACCTTGGACTCCATTAGCTCCAACATTAAGGACATGAGCCAAAGTATTCCTATTGAGGATAT  
 GCTGTTACAGGCTCCCATACCTTAATAACAGCAACAGATACTTAAACCAGGAGCTGCCAAGCTGGAA  
 GAATATGACTCGTACTGGTGGCTGGGTGGCTTATTGTCTGCTTTCTGCTGACTCTCATTGTGACCTTCT  
 TTTTCTGGGCTTGTGTGTGGTGTGTTGGCTATGACAAGCATGCCACCCCACTAGAAGAGGCTGTGT  
 GTCCAACACTGGAGGCATCTTCTCATGGCTGGGGTTGGATTCCGCTTCTTTTTTGTGGATATTGATG  
 ATCCTTGTGGTCTTACGTTTGTGTTGGTGCAAATGTGGAAAAGTTGCTCTGCGAACCTTATGAAAACA  
 AGAAATATTACAGGTTTTGGACTCCCTATCTGCTCAAGGAACAATGGCAATTTTATCTTTCTGGCAT  
 GCTATTCAATAACCCAGACATTAACATGACCTTTGAGCAAGTCTACAGGGATTGCAAAGAGGTCGAGGT  
 ATATATGCTGCTTTTCAGCTTGAAGTGTGTCACGTCAGTATCATTCAACATTGACCAGATTTCTG  
 AAAACATAAATACGGAGTTGAAAACCTGAATGTGAACATTGATAGCATTGAACTGTTGGATAACACAGG  
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 GCACTGGGTCTTTTATGCCATCACAGAGAAGATGACATCCTGCAAACCCATGGCCACCCGATGGACTCT  
 GCTGTTAATGGCATTCTGTGTGGCTATGTTGCGGACCCTCTGAATTTGTTCTGGTTCGGCATAGGGAAAG  
 CCACGGTCTCTTACTTCCGGCTGTAATCATTGCTATCAAGCTGGCCAAGTACTATCGCAGGATGGATTC  
 AGAGGATGTATACGACTCGTCCGTCTCGGGATGTGGCATTTCACCTTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR225616 representing NM\_001163578  
 Red=Cloning site Green=Tags(s)

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MALVFSALLLLGLCGKISSEGGPAPHNTPGAMNYELPTTKYETQDTFNAGIVGPLYKMHIFLNVVQPND
FPLDLIKKLIQKNFDISVDSKEIALYEIGVLICAILGLLFIILMPLVGCFCCMCRCCKCGGEMHQKQK
QNAPCRRKCLGLSLLVICLLMSLGIYGFVANQQTRTRIKGTQKLAKSNFRDFQTLLETETPKQIDYVVEQ
YTNTKNKAFSDLDGIGSVLGGRIKDQLKPKVTPVLEEIKAMATAIKQTKDALQNMSSSLKSLQDAATQLN
TNLSSVRNSIENSLSSSDCTSDPASKICDSIRPSLSSLGSSLNSSLPSVDRELNTVTEVDKTDLESVVK
RGYTTIDEIPNTIQNTVDVIKDVKNTLDSISSNIKDMSQSIPIEDMLLQVSHYLNNSRYLNQELPKLE
EYDSYWWLGGGLIVCFLLTLIVTFFFLGLLCGVFGYDKHATPTRRGCVSNTGGIFLMAGVGFGLFCWILM
ILVVLTFVVGANVEKLLCEPYENKLLQVLDTPYLLKEQWQFYLSGMLFNNPDINMTFEQVYRDCKRGRG
IYAAFQLENNVNSDHFNIDQISENINTELENLNVNIDSIELLDNTGRKSLEDFAHSGIDTIDYSTYLKE
TEKSPTEVNLLTFASTLEAKANQLPEGKLLKQAFLLDVQNIIRAIHQHLLPPVQQLNLRQSVWTLQQTSN
KLPEKVKKILASLDSVQHFLTNNVSLIVIGETKKFGKTIILGYFEHYLHWVFYAIKTEKMTSCKPMATAMDS
AVNGILCGYVADPLNLFWFGIGKATVLLLPAVIAIAIKLAKYYRRMDSSEVYDDSSVSGMWHFTL
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001163578

**ORF Size:** 2502 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.

**RefSeq:** [NM\\_001163578.1](#), [NP\\_001157050.1](#)

**RefSeq Size:** 2728 bp

**RefSeq ORF:** 2505 bp

**Locus ID:** 19126

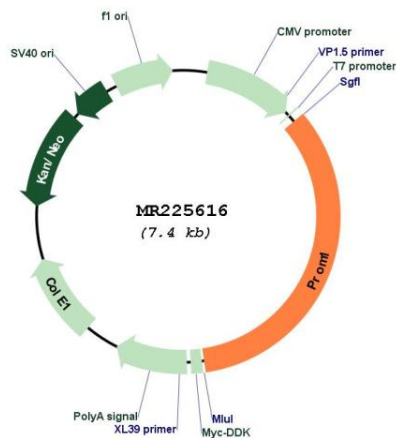
**UniProt ID:** [O54990](#)

**Cytogenetics:** 5 B3

**MW:** 93.9 kDa

**Gene Summary:** May play a role in cell differentiation, proliferation and apoptosis. Binds cholesterol in cholesterol-containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis (PubMed:19228982). Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR225616