

Product datasheet for **RG217699**

GPNMB (NM_002510) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPNMB (NM_002510) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GPNMB
Synonyms:	HGFIN; NMB; PLCA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG217699 representing NM_002510
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAATGTCTCTACTATTTCTGGATTCTGCTCCTGGCTGCAAGATTGCCACTTGATGCCGCCAAAC
 GATTTTCATGATGTGCTGGCAATGAAAGACCTTCTGCTTACATGAGGGAGCACAATCAATTAATGGCTG
 GTCTTCTGATGAAAATGACTGGAATGAAAACTTACCCAGTGTGGAAGCGGGGAGACATGAGGTGAAAA
 AACTCCTGGAAGGGAGGCCGTGTGCAGGCGGTCTGACCAGTACTCACCAGCCCTCGTGGGCTCAAATA
 TAACATTTGCGGTGAACCTGATATTCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGA
 GAAGAAGTGCAGAAATGAGGCTGGTTTATCTGCTGATCCGTATGTTTACAAGTGGACAGCATGGTCAGAG
 GACAGTGCAGGGGAAAATGGCACCAGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAACCTTTTCCTC
 ACCACCCCGATGGAGAAGATGGAATTTTACCTACGTCTTCCACACACTGGTCACTATTCCAGAAATT
 GGGACGATGTTTCACTGAGAGTTTCTGTGAACACAGCCAATGTGACTTGGCCCTCAACTCATGGAAGTG
 ACTGTCTACAGAAGACATGGACGGGCATATGTTCCCATCGCACAAGTGAAGATGTGTACGTGGTAAACAG
 ATCAGATTCCTGTGTTTGTGACTATGTTCCAGAAGAACGATCGAAATTCATCCGACGAAACCTTCCTCAA
 AGATCTCCCCATTATGTTTGATGCTCCTGATTATGATCCTAGCCACTTCCTCAATTATTCTACCATTAAC
 TACAAGTGGAGCTTCGGGGATAACTGGCCTGTTTGTTCACCAATCATACTGTGAATCACACGTATG
 TGCTCAATGGAACCTTACGCTTAACTCACTGTGAAAGTGCAGCACCAGGACCTTGTCCGCCACCGCC
 ACCACCACCCAGACCTTCAAACCCACCCCTTCTTAGGACCTGCTGGTGACAACCCCTGGAGCTGAGT
 AGGATTCCTGATGAAAAGTGCAGATTAACAGATATGGCCACTTCAAGCCACCATCACAATTGTAGAGG
 GAATCCTTAGAGGTTAACATCAGATCAGACAGCCTGATGCGCGTGCATGGCCCTGAAAGCTCCCT
 AATAGACTTTGCTGACTGCCAAGGGAGCATTCCACGAGGCTGTACCATCATTCTGACCCACC
 TGCAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGGATGAGATGTGTCTGCTGACTGTGAGAC
 GAACCTTCAATGGGTCTGGGACGACTGTGTGAACCTCACCTGGGGGATGACACAAGCCTGGCTCTCAC
 GAGCACCCTGATTTCTGTTCTGACAGAGACCCAGCCTCGCCTTAAGGATGGCAACAGTGCCCTGATC
 TCCGTTGGCTGCTGGCCATATTTGCTACTGTGATCTCCCTCTTGGTGTACAAAAACACAAGGAATACA
 ACCCAATAGAAAATAGTCTGGGAATGTGGTCAAGCAAGGCCTGAGTGTCTTCTCAACCGTGCAA
 AGCCGTGTTCTCCCGGAAACCAGGAAAAGGATCCGCTACTCAAAAACCAAGAATTTAAGGAGTTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217699 representing NM_002510
 Red=Cloning site Green=Tags(s)

MECLYYFLGFLLLAARLPLDAAKRFHVDLGNRPSAYMREHNQLNGWSSDENDWNEKLYPVWKRGMRWK
 NSWKGGRVQAVLTS DSPALVGSNITFAVNLIFFRCQKEDANGNIYVEKNCRNEAGLSADPYVYNWTAWSE
 DSDGENGTGQSHHNVFPDGKPFPHHPGWRWNFIYVFHTLGQYFQKLGRCVRSVNTANVTLGPQLMEV
 TVYRRHGRAYVPIAQVKDYYVVDQIPVFVTFMQKNDNRNSDETFLKDLPIIMFDVLIHDPHFNLNYSTIN
 YKWSFGDNTGLFVSTNHTVNHTYVNLGTFSLNLTVKAAAPGPCPPPPPPRPSKPTPSLGPAGDNPLELS
 RIPDENCQINRYGHFQATITIVGILEVNI IQMTDVLMPVPWPESLIDFVVTCQGSIPTEVCTIISDPT
 CEITQNTVCSVDVDEMCLLTVRRTFNGSGTYCVNLTLGDDTSLALTSTLISVPDRDPASPLRMANSALI
 SVGCLAIFVTVISLLVYKHKHKEYNPIENSPGNVVRKGLSVFLNRAKAVFFPGNQEKDPLLKNQEFKGV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_002510

ORF Size: 1683 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_002510.3](#)

RefSeq Size: 2739 bp

RefSeq ORF: 1683 bp

Locus ID: 10457

UniProt ID: [Q14956](#)

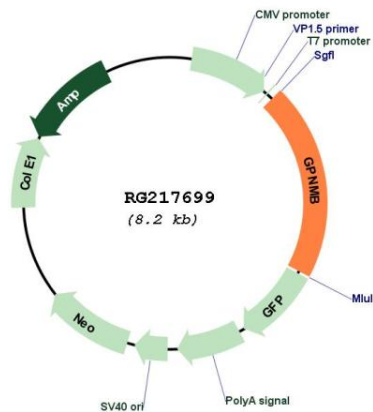
Cytogenetics: 7p15.3

Domains: PKD

Protein Families: Druggable Genome, Transmembrane

Gene Summary: The protein encoded by this gene is a type I transmembrane glycoprotein which shows homology to the pMEL17 precursor, a melanocyte-specific protein. GPNMB shows expression in the lowly metastatic human melanoma cell lines and xenografts but does not show expression in the highly metastatic cell lines. GPNMB may be involved in growth delay and reduction of metastatic potential. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG217699