

Product datasheet for **RC217699**

GPNMB (NM_002510) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPNMB (NM_002510) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPNMB
Synonyms:	HGFIN; NMB; PLCA3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC217699 representing NM_002510
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAATGTCTACTATTTCTGGGATTCTGCTCCTGGCTGCAAGATTGCCACTTGATGCCGCCAAAC
 GATTTTCATGATGTGCTGGCAATGAAAGACCTTCTGCTTACATGAGGGAGCACAATCAATTAATGGCTG
 GTCTTCTGATGAAAATGACTGGAATGAAAACTTACCCAGTGTGGAAGCGGGGAGACATGAGGTGAAAA
 AACTCCTGGAAGGGAGGCCGTGTGCAGGCGGTCTGACCAGTGACTACCAGCCCTCGTGGGCTCAAATA
 TAACATTTGCGGTGAACCTGATATTCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGA
 GAAGAAGTGCAGAAATGAGGCTGGTTTATCTGCTGATCCGTATGTTTACAAGTGGACAGCATGGTCAGAG
 GACAGTGACGGGAAAAATGGCACCGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAACCTTTTCCTC
 ACCACCCCGATGGAGAAGATGGAATTTTACCTACGTCTTCCACACACTGGTCAGTATTTCCAGAATT
 GGGACGATGTTTCACTGAGAGTTTCTGTGAACACAGCCAATGTGACTTGGCCCTCAACTCATGGAAGTG
 ACTGTCTACAGAAGACATGGACGGGCATATGTTCCCATCGACAAGTGAAGATGTGTACGTGGTAAACAG
 ATCAGATTCCTGTGTTTGTGACTATGTTCCAGAAGAACGATCGAAATTCATCCGACGAAACCTTCCTCAA
 AGATCTCCCCATTATGTTTGATGTCTGATTATGATCCTAGCCACTTCCCTCAATTATTCTACCATTAAC
 TACAAGTGGAGCTTCGGGGATAACTGGCCTGTTTGTTCACCAATCATACTGTGAATCACACGTATG
 TGCTCAATGGAACCTTACGCTTAACTCACTGTGAAAGTGCAGCACCAGGACCTTGTCCGCCACCGCC
 ACCACCACCCAGACCTTCAAACCCACCCCTTCTTTAGGACCTGCTGGTGACAACCCCTGGAGCTGAGT
 AGGATTCCTGATGAAAAGTCCAGATTAACAGATATGGCCACTTCAAGCCACCATCACAATTGTAGAGG
 GAATCCTTAGAGGTTAACATCATCCAGATGACAGACGCTCTGATGCCGGTGCCATGGCCTGAAAGCTCCCT
 AATAGACTTTGTGCTGACCTGCCAAGGGAGCATTCCACGGAGGCTGTACCATCAATTTCTGACCCACC
 TGCGAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGGATGAGATGTGTCTGCTGACTGTGAGAC
 GAACCTTCAATGGGTCTGGGACGTACTGTGTGAACCTCACCTGGGGGATGACACAAGCCTGGCTCTCAC
 GAGCACCTGATTTCTGTTCCTGACAGAGACCCAGCCTCGCCTTAAAGGATGGCAACAGTGCCCTGATC
 TCCGTTGGCTGCTGGCCATATTTGCTACTGTGATCTCCCTCTTGGTGTACAAAAACACAAGGAATACA
 ACCCAATAGAAAATAGTCTGGGAATGTGGTCAAGCAAGGCCTGAGTGTCTTCTCAACCGTGCAAA
 AGCCGTGTTCTTCCGGGAAACCAGGAAAAGGATCCGCTACTCAAAAACCAAGAATTTAAAGGAGTTTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217699 representing NM_002510
 Red=Cloning site Green=Tags(s)

MECLYYFLGFLLLAARLPLDAAKRFHDLVGNRPSAYMREHNQLNGWSSDENDWNEKLYPVWKRGMRWK
 NSWKGGRRVQAVLTSDSPALVGSNITFAVNLIFPRCQKEDANGNIYVEKNCRNEAGLSADPYVYNWTAWSE
 DSDGENGTGQSHHNVPDQKPFPHHPGWRWNFIYVFHTLGQYFQKLGRCVSRVSVNTANVTLGPQLMEV
 TVYRRHGRAYVPIAQVKDYYVVTQIPVFTVMFQKNDNRNSSETFLKDLPIIMFDVLIHDPHFLLNYSTIN
 YKWSFGDNTGLFVSTNHTVNHTYVNLNGTFSLNLTVKAAAPGPCPPPPPPRPSKPTPSLGPAGDNPLELS
 RIPDENCQINRYGHFQATITIVEGILEVNIQMTDVLMPVPWPPESSLIDFVVTCQGSIPTEVCTIISDPT
 CEITQNTVCSVDVDEMCLLTVRRTFNGSGTYCVNLTLGDDTSLALSTLISVPDRDPASPLRMANSALI
 SVGCLAIFVTVISLLVYKHKKEYNPIENSPGNVVRKGLSVFLNRAKAVFFPGNQEKDPLLKNQEFKGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

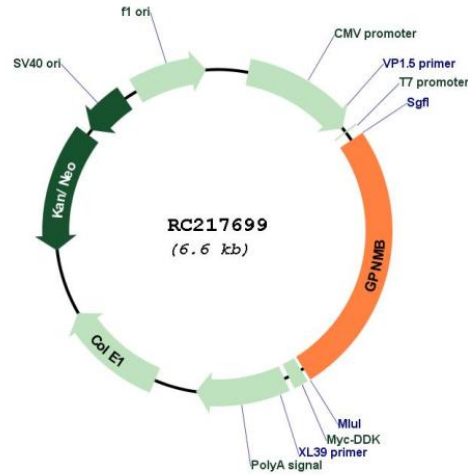
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_002510
ORF Size:	1680 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:	<ol style="list-style-type: none">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
MW:	62.64 kDa
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]