

## Product datasheet for **SC300913**

### **GPNMB (NM\_001005340) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GPNMB (NM_001005340) Human Untagged Clone
Tag:	Tag Free
Symbol:	GPNMB
Synonyms:	HGFIN; NMB; PLCA3
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

>OriGene ORF sequence for NM\_001005340 edited  
 ATGGAATGTCTCTACTATTTCTGGGATTTCTGCTCCTGGCTGCAAGATTGCCACTTGAT  
 GCCGCCAAACGATTTTCATGATGTGCTGGGCAATGAAAGACCTTCTGCTTACATGAGGGAG  
 CACAATCAATTAATGGCTGGTCTTCTGATGAAAATGACTGGAATGAAAACTCTACCCA  
 GTGTGGAAGCGGGGAGACATGAGGTGAAAACTCCTGGAAGGGAGGCCGTGTCAGGCCG  
 GTCCCTGACCAGTGACTCACCAGCCCTCGTGGGCTCAAATAAACATTTGCGGTGAACCTG  
 ATATTCCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAAGAAGTGC  
 AGAAATGAGGCTGGTTTATCTGCTGATCCGTATGTTTACAACCTGGACAGCATGGTCAGAG  
 GACAGTGACGGGAAAATGGCACCGGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAA  
 CCTTTTCTCACCACCCCGGATGGAGAAGATGGAATTTTCATCTACGTCTTCCACACACTT  
 GGTGAGTATTTCCAGAAATGGGACGATGTTTCACTGAGAGTTTCTGTGAACACAGCCAAT  
 GTGACACTTGGGCTCAACTCATGGAAGTACTGTCTACAGAAGACATGGACGGGCATAT  
 GTTCCCATCGACAAGTAAAGATGTGTACGTGGTAACAGATCAGATTCCTGTGTTTGTG  
 ACTATGTTCCAGAAGAAGATCGAAATTCATCCGACGAAACCTTCTCAAAGATCTCCCC  
 ATTATGTTTGATGTCCTGATTCATGATCCTAGCCACTTCTCAATTATTCTACCATTAAC  
 TACAAGTGGAGCTTCGGGGATAACTGACCTGTTTGTTCACCAATCATACTGTGAAT  
 CACACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGACCA  
 GGACCTTGTCCGCCACCGCCACCACCAGACCTTCAAACCCACCCCTTCTTTAGCA  
 ACTACTCTAAATCTTATGATTCAAACACCCAGGACCTGCTGGTGACAACCCCTGGAG  
 CTGAGTAGGATTCCTGATGAAAATGCCAGATTAACAGATATGGCCACTTCAAGCCACC  
 ATCACAATTGTAGAGGGAATCTTAGAGGTTAACATCATCCAGATGACAGACGTCCTGATG  
 CCGGTGCCATGGCCTGAAAGTCCCTAATAGACTTTGTCGTGACCTGCCAAGGGAGCATT  
 CCCACGGAGGTCGTACCATCATTCTGACCCACCTGCGAGATCACCCAGAACACAGTC  
 TGCAGCCCTGTGGATGTGGATGAGATGTGTCTGCTGACTGTGAGACGAACCTCAATGGG  
 TCTGGGACGTACTGTGTGAACCTCACCTGGGGATGACACAAGCCTGGCTCTCACGAGC  
 ACCCTGATTTCTGTTCTGACAGAGACCCAGCCTCGCCTTTAAGGATGGCAAACAGCGCC  
 CTGATCTCCGTTGGCTGCTTGGCCATTTTGTCACTGTGATCTCCCTCTTGGTGTACAAA  
 AAACACAAGGAATACAACCCAATAGAAAATAGTCTGGGAATGTGGTCAAGCAAGGC  
 CTGAGTGTCTTTCTCAACCGTCAAAAAGCCGTGTTCTTCCCGGAAACCAGGAAAAGGAT  
 CCGCTACTCAAAAACCAAGAATTTAAAGGAGTTTCTTAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001005340 unedited  
 NNGGTTCAAATTTTGTAAACGACTCACTATAGNNGGCGCGCGNNAATTCGGCACGAG  
 GGGTGGNACGGGCCAGNAGNAATTACAGATTAACCTTGAGTGCCTGCGTCCGTGAGA  
 ATTCAGCATGGAATGTCTCTACTATTTCTGGGATTTCTGCTCCTGGCTGCAAGATTGCC  
 ACTTGATGCCGCAAACGATTTTCATGATGTGCTGGGCAATGAAAGACCTTCTGCTTACAT  
 GAGGGAGCACAATCAATTAATGGCTGGTCTTCTGATGAAAATGACTGGAATGAAAACT  
 CTACCCAGTGTGGAAGCGGGGAGACATGAGGTGAAAACTCCTGGAAGGGAGGCCGTGT  
 GCAGGCGGTCTGACCAGTGACTCACCAGCCCTCGTGGGCTCAAATAAACATTTGCGGT  
 GAACCTGATATTCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAA  
 GAACTGCAGAAATGAGGCTGGTTTATCTGCTGATCCGTATGTTTACAACCTGGACAGCATG  
 GTCAGAGGACAGTGACGGGAAAATGGCACCGGCCAAAGCCATCATAACGTCTTCCCTGA  
 TGGGAAACCTTTTCTCACCACCCCGGATGGAGAAGATGGAATTTTCATCTACGTCTTCCA  
 CACTTGGTCAGTATTTCCAGAAATGNGACGATGTTTCACTGAGAGTTTCTGTGAACAC  
 AGCCAATGTGACACTTNGCCTCAACTCATGGAAGTACTGTCTACAGAAGACATGGACG  
 GGCATATGTTCCATCGACAAGTAAAGATGTGTACGTGGTAACAGATCAGATTCCTGT  
 GTTTGTGACTATGTTCCAGAAAGACGATCGAATTCATCCGACGAAACCTTCTCAAAGAT  
 CTCCNCATTATGNTTGTGTCCTGATTCATGATCCCTACCCTTCTNCTNCTATNCTAC  
 CATTACTA

**3' Read Nucleotide Sequence:**

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>Forward primer walk for NM_001005340 unedited
CATTGATTTGTTACTGCGNANCTCCNCTTGGTGTACAAAAACCAGGNAACAACCCAT
AGAAAATAGTCTGGGAATGTGGTCAGAAAGCAAAGGCCTGAGTGTCTTTCTCAACCGTGC
AAAAGCCGTGTTCTTCCCGGAAACCAGGAAAAGGATCCGCTACTCAAAAACCAAGAATT
TAAAGGAGTTTCTAAATTTTCGACCTTGTCTGAAGCTCACTTTTCAGTGCCATTGATG
TGAGATGTGCTGGAGTGGCTATTAACCTTTTTTTCCTAAAGATTATTGTTAAATAGATAT
TGTGGTTTGGGAAGTTGAATTTTTTATAGTTAAATGTCATTTTAGAGATGGGAGAGG
GATTATACTGCAGGCAGCTTCAGCCATGTTGTGAAACTGATAAAAGCAACTTAGCAAGGC
TTCTTTTCATTATTTTTTATGTTTCACTTATAAAGCTTAGGTAAGTACTAGTAGGATAGAAA
CACTGTGTCCCGAGAGTAAGGAGAGAAGCTACTATTGATTAGAGCCTAACCCAGGTTAAC
TGCAAGAAGAGGCGGATACTTTTCAGCTTTCCATGTAAGTGTATGCATAAAGCCAATGTA
GTCCAGTTTCTAAGATCATGTTCCAAGCTAACTGAATCCCACTTCAATACACTCATGA
ACTCCTGATGGAACAATAACAGGCCCAAGCCTGTGGTATGATGTGCACACTTGCTAGACT
CAGAAANATACTACTCTCAAAATGGGTGGGAGTNATTTGGTGACNACCTACTTTNGCTGN
CTGAGTGAAGGATGATATTCATATTTTATTCCATGGACNATTAGTAGTGGCTNT
TATATAACANGCATGATGCTGAGTGACACTCTTGTGATATTTCCAATTTTGTACAGTC
GCTGCACATATTTGAAATCATATATTAAGACTTTTCAAGAT
```

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_001005340

**Insert Size:**

2700 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](mailto: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:**

The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

**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:	<a href="#">NM_001005340.1</a> , <a href="#">NP_001005340.1</a>
RefSeq Size:	2775 bp
RefSeq ORF:	1719 bp
Locus ID:	10457
UniProt ID:	<a href="#">Q14956</a>
Cytogenetics:	7p15.3
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a).</p>