

Product datasheet for **RG205712**

Prune homolog 2 (PRUNE2) (NM_138818) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Prune homolog 2
Synonyms:	BMCC1, BNIPXL, C9orf65, KIAA0367, A214N16.3, bA214N16.3
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205712 representing NM_138818
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGAATTTTTCGAACGCGCCAAATCTAACTGAATCGAAGCAAACGCTTGGAGAAGGTCCATGTGG
TTATTGGGCCTAAATCGTGTGACTTGGATTCTCTCATTCTACCTTCACATATGCTTACTTTCTAGACAA
GGTCAGTCCACCAGGGTTCTGTGTTACCAAGTCTGAACATACCAAGAACTGAATCAACTACTTCACC
GAGACGAGGTTTATTTAGAAGAGCTAAATATTTCCGAATCATTCCACATATTCGGGATGAAATTAACC
TGCATCAGCTAAATGATGAAGGGAAGTTATCGATAACACTTGTGGCAGCAGTGTGCTGGCAGTGAAGA
CAAACTTTAGAATCAGCAGTTGTCAAAGTCATTAATCCGGTTGAGCAGAGCGATGCCAACGTTGAGTTC
CGAGAGTCTTCTCTCTCTCGTGCTAAAGGAGATTCTCAAGAGGCTCCTGAGCTCATCACCAGCAAC
TGGCTCATCGCCTCAGAGGTAGCATTCTTTCAAGTGGATGACCATGGAATCAGAGAAGATCTCAGAGAA
GCAGGAGGAAATCTTTCTATCCTGGAAGAAAAATTTCTAACTTGCTCCAAGAGAGGACATCATCAAC
GTCTACAGGAGACCCAGTTCAGTGCTCAGGGTTAAGTATTGAACAGACAATGTTGAAAGATCTAAAGG
AGCTGTCAGATGGAGAAATAAAGTGGCCATTAGTACTGTGAGCATGAACCTTGAGGTAAGGGTGGGAAT
GCTTTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



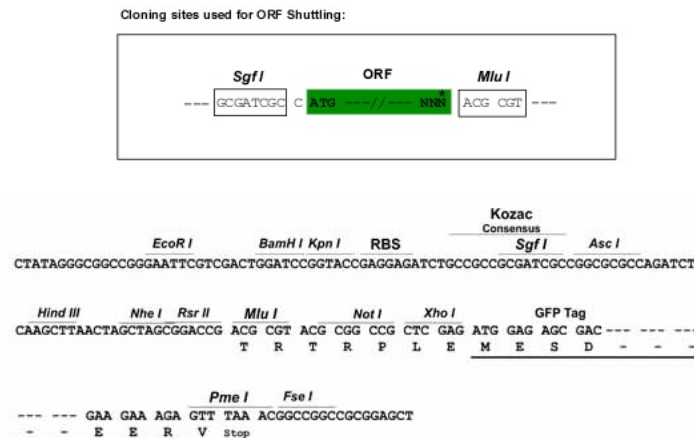
Protein Sequence: >RG205712 representing NM_138818
Red=Cloning site Green=Tags(s)

MEEFLQRAKSKLNRSKRLEKVHVIGPKSCDLSLISTFTYAYFLDKVSPPGVLCPLVNIIPRTEFNFT
ETRFILLEELNISESFHIFRDEINLHQLNDEGKLSITLVGSSVLASEDKTLESAYVKVINPVEQSDANVEF
RESSSSLVLKEILQEAPELITEQLAHLRGSILFKWMTMESEKISEKQEEILSILEEKFPNLPPREDIIN
VLQETQFSAQGLSIEQTMLKDLKELSDGEIKVAISTVSMNLEVRVGMLF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138818

ORF Size: 777 bp

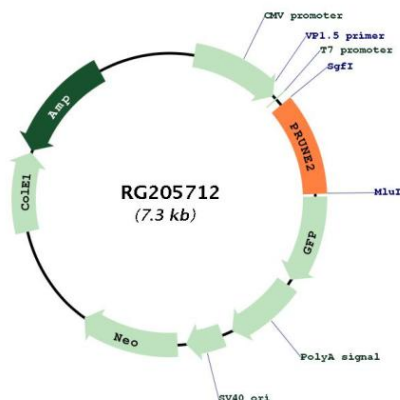
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_138818.2</u> , <u>NP_620173.1</u>
RefSeq Size:	1264 bp
RefSeq ORF:	779 bp
Locus ID:	158471
Cytogenetics:	9q21.2
Gene Summary:	The protein encoded by this gene belongs to the B-cell CLL/lymphoma 2 and adenovirus E1B 19 kDa interacting family, whose members play roles in many cellular processes including apoptosis, cell transformation, and synaptic function. Several functions for this protein have been demonstrated including suppression of Ras homolog family member A activity, which results in reduced stress fiber formation and suppression of oncogenic cellular transformation. A high molecular weight isoform of this protein has also been shown to colocalize with Adaptor protein complex 2, beta-Adaptin and endodermal markers, suggesting an involvement in post-endocytic trafficking. In prostate cancer cells, this gene acts as a tumor suppressor and its expression is regulated by prostate cancer antigen 3, a non-protein coding gene on the opposite DNA strand in an intron of this gene. Prostate cancer antigen 3 regulates levels of this gene through formation of a double-stranded RNA that undergoes adenosine deaminase actin on RNA-dependent adenosine-to-inosine RNA editing. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]

Product images:



Circular map for RG205712