

## Product datasheet for **RG210035**

### PCBP2 (NM\_005016) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCBP2 (NM_005016) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCBP2
Synonyms:	hnRNP-E2; HNRNPE2; HNRPE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210035 representing NM_005016 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGACACCGGTGTGATTGAAGGTGGATTAATGTCACTCTCACCATCCGGCTACTTATGCATGGAAGG  
AAGTTGGCAGTATCATCGAAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACGTAT  
CAACATCTCAGAAGGGAATTGCTCTGAGAGAATTACACTTTGGCTGGACCCACTAATGCCATCTTCAA  
GCCTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAATAGCACAGCTGCCA  
GTAGACCCCGGTACCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTCATTGAAAAGGTGG  
ATGCAAGATCAAGGAAATACGAGAGAGTACAGGGGCTCAGGTCCAGGTGGCAGGGGATATGCTACCCAAC  
TCAACTGAGCGGGCCATCACTATTGCTGGCATTCCACAATCCATCATTGAGTGTGTCAAAACAGATCTGCG  
TGGTCATGTTGGAGACTCTCTCCAGTCCCCCGAAGGGCGTGACCATCCCGTACCGGCCAAAGCCGTC  
CAGCTCTCCGGTCATCTTTCAGGTGGTCCAGGACAGGTACAGCACAGGCAGCGACAGTGCAGCTTTCCC  
CACACCACCCGTCATGTGCCTCAACCCTGACCTGGAGGGACCCTCTAGAGGCTATAACCATTCAAG  
GACAGTATGCCATTCCACAGCCAGATTTGACCAAGCTGCACCAGTTGGCAATGCAACAGTCTCATTTTCC  
CATGACGCATGGCAACACCGGATTCAGTGGCATTGAATCCAGCTCTCCAGAGGTGAAAGGCTATTGGGCA  
GGTTTGGATGCATCTGCTCAGACTACTTCTCATGAACCTCACCATTCCAAACGATTTGATTGGCTGCATA  
TCGGGCGTCAAGGCGCCAAAATCAATGAGATCCGTCAGATGTCTGGGGCGCAGATCAAAATTGCGAACCC  
AGTGAAGGATCTACTGATAGGCAGGTTACCATCACTGGATCTGCTGCCAGCATTAGCCTGGCTCAATAT  
CTAATCAATGTCAGGCTTCTCCTCGGAGACGGGTGGCATGGGGAGCAGC

**ACGGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG210035 representing NM\_005016  
 Red=Cloning site Green=Tags(s)

MDTGVIIEGGLNVTLTIRLLMHGKEVGSIIIGKKGESVKKMREESGARINISEGNCPERIITLAGPTNAIFK  
 AFAMIIDKLEEDISSSMTNSTAASRPPVTLRLVVPASQCGSLIGKGGCKIKEIRESTGAQVQVAGDMLPN  
 STERAIT IAGIPQSIIECVKQICVVMLETL SQSPPKGVTIPYRKPSSSPVIFAGGQDRYSTGSDSASFP  
 HTTPSMCLNPDLLEGPPLEAYTIQGOYAIPQDLTKLHQLAMQQSHFPMTHGNTGFSGIESSPEVKGYWA  
 GLDASAQTTSHELTIPNDLIGCIIGRQGAKINEIRQMSGAQIKIANPVEGSTDRQVTITGSAASISLAQY  
 LINVRLSSETGGMGSS

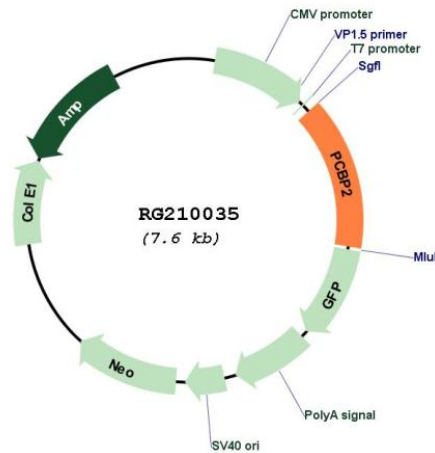
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_005016

<b>ORF Size:</b>	1098 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_005016.6</a>
<b>RefSeq Size:</b>	1684 bp
<b>RefSeq ORF:</b>	1101 bp
<b>Locus ID:</b>	5094
<b>UniProt ID:</b>	<a href="#">Q15366</a>
<b>Cytogenetics:</b>	12q13.13
<b>Domains:</b>	KH

**Gene Summary:**

The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and hnRNPK, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions as a translational coactivator of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES, promoting poliovirus RNA replication by binding to its 5'-terminal cloverleaf structure. It has also been implicated in translational control of the 15-lipoxygenase mRNA, human papillomavirus type 16 L2 mRNA, and hepatitis A virus RNA. The encoded protein is also suggested to play a part in formation of a sequence-specific alpha-globin mRNP complex which is associated with alpha-globin mRNA stability. This multiexon structural mRNA is thought to be retrotransposed to generate PCBP-1, an intronless gene with functions similar to that of PCBP2. This gene and PCBP-1 have paralogous genes (PCBP3 and PCBP4) which are thought to have arisen as a result of duplication events of entire genes. This gene also has two processed pseudogenes (PCBP2P1 and PCBP2P2). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2018]