

## Product datasheet for **RG218711**

### Carboxypeptidase B2 (CPB2) (NM\_016413) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase B2 (CPB2) (NM_016413) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CPB2
Synonyms:	CPU; PCPB; TAFI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218711 representing NM_016413 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCTTTCAGCCTTGCAGTCCTTGTACCCATTGTTCTCTTCTGTGAGCAGCATGTCTTCGCGTTTC  
AGAGTGGCCAAGTTCTAGCTGCTTCTCTAGAACCCTAGGCAAGTTCAAGTTCTACAGAATCTTACTAC  
AACATATGAGATTGTTCTCTGGCAGCCGGTAACAGCTGACCTTATTGTGAAGAAAAACAAGTCCATTTT  
TTTGTAATGCATCTGATGTCGACAATGTGAAAGCCATTTAAATGTGAGCGGAATTCATGCAGTGTCT  
TGCTGGCAGATGTGGAAGATCTTATTCAACAGCAGATTTCCAACGACACAGTCAGCCCCGAGCCTCCGC  
ATCGTACTATGAACAGTATCACTCACTAAATGAAATCTATTCTTGATAGAATTTATAACTGAGAGGCAT  
CCTGATATGCTTACAAAAATCCACATTGGATCCTCATTGAGAAGTACCCACTCTATGTTTTAAAGTTT  
CTGAAAAAGAACAAGCAGCCAAAAATGCCATATGGATTGACTGTGGAATCCATGCCAGAGAATGGATCTC  
TCCTGCTTTCTGCTTGTGGTTCTAGGCCATAATCGAATGTGGAGAAAGAACCCTTTCTTATGCGAAC  
AATCATTGCATCGGAACAGACCTGAATAGGAACCTTGTCTCCAAACACTGGTGTGAGGAAGGTGCATCCA  
GTTCTCATGCTCGAAACCTACTGTGGACTTTATCCTGAGTCAGAACCAGAAGTGAAGGCAGTGGCTAG  
TTTCTTGAGAAGAAATATCAACCAGATTAAGCATACATCAGCATGCATTCATACTCCAGCATATAGTG  
TTTCCATTTCTATACACGAAGTAAAAGCAAAGACCATGAGGAACTGTCTTAGTAGCCAGTGAAGCAG  
TTGCTGCTATTGAGAAAATTAGTAAAAATACCAGGTATACACATGGCCATGGCTCAGAAACCTTATACCT  
AGCTCCTGGAGGTGGGGACGATTGGATCTATGATTTGGGCATCAAATATTCGTTTACATCAAACCCACCT  
GTAGAGAAGCTTTGCCGCTGTCTCTAAAA

**ACGGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG218711 representing NM\_016413  
Red=Cloning site Green=Tags(s)

MKLCSLAVLVPIVLFCEQHVFAFQSGQVLAALPRTSRQVQVLQNLTTTYEIVLWQPVTADLIVKKKQVHF  
 FVNASDVDNVKAHLNVSGIPCSVLLADVEDLIQQQISNDTVSPRASASYEQYHSLNEIYSWIEFITERH  
 PDMLTKIHIGSSFKEYPLYVLKVSQKEQAAKNAIWDICGIHAREWISPAFCLWFIGHNRMWRKNRSFYAN  
 NHCIGTDLNRNFASKHWCEEGASSSSCSETYCGLYPESEPEVKAVASFLRRNINQIKAYISMHSYSQHIV  
 FPYSYTRSKSKDHEELSLVASEAVRAIEKISKNTRYTHGHGSETLYLAPGGDDWIYDLGIKYSFTSNPP  
 VEKLLPLSLK

TRTRPLE - GFP Tag - V

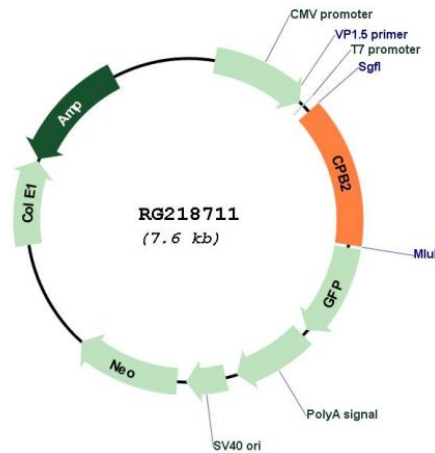
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_016413

<b>ORF Size:</b>	1080 bp
<b>OTI Disclaimer:</b>	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>
<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_016413.2</a> , <a href="#">NP_057497.2</a>
<b>RefSeq Size:</b>	1560 bp
<b>RefSeq ORF:</b>	1082 bp
<b>Locus ID:</b>	1361
<b>Cytogenetics:</b>	13q14.13
<b>Domains:</b>	Zn_carbOpept, Propep_M14
<b>Protein Families:</b>	Druggable Genome, Protease, Secreted Protein
<b>Protein Pathways:</b>	Complement and coagulation cascades
<b>Gene Summary:</b>	Carboxypeptidases are enzymes that hydrolyze C-terminal peptide bonds. The carboxypeptidase family includes metallo-, serine, and cysteine carboxypeptidases. According to their substrate specificity, these enzymes are referred to as carboxypeptidase A (cleaving aliphatic residues) or carboxypeptidase B (cleaving basic amino residues). The protein encoded by this gene is activated by trypsin and acts on carboxypeptidase B substrates. After thrombin activation, the mature protein downregulates fibrinolysis. Polymorphisms have been described for this gene and its promoter region. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]