

## Product datasheet for RC237896

### Carboxypeptidase B2 (CPB2) (NM\_001278541) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase B2 (CPB2) (NM_001278541) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CPB2
Synonyms:	CPU; PCPB; TAFI
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC237896 representing NM_001278541 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCTTTCAGCCTTGCAGTCCTTGTACCCATTGTTCTTCTGTGAGCAGCATGTCTTCGCGTTTC  
AGAGTGGCCAAGTTCTAGCTGCTTCTCCTAGAACCCTAGGCAAGTTCAAGTTCTACAGAATCTTACTAC  
AACATATGAGATTGTTCTCTGGCAGCCGGTAACAGCTGACCTTATTGTGAAGAAAAACAAGTCCATTTT  
TTTGTAATGCATCTGATGTCGACAATGTGAAAGCCATTTAAATGTGAGCGGAATTCATGCAGTGTCT  
TGCTGGCAGATGTGGAAGATCTTATTCAACAGCAGATTTCCAACGACACAGTCAGCCCCGAGCCTCCGC  
ATCGTACTATGAACAGTATCACTCACTAAATGAAATCTATTCTTGGATAGAATTTATAACTGAGAGGCAT  
CCTGATATGCTTACAAAAATCCACATTGGATCCTCATTGAGAAGTACCCACTCTATGTTTTAAAGGTTT  
CTGGAAAAGAACAAGCAGCCAAAAATGCCATATGGATTGACTGTGGAATCCATGCCAGAGAATGGATCTC  
TCCTGCTTCTGCTTGTGGTTTATAGGCCATAATCGAATGTGGAGAAAGAACCCTTCTTCTATGCGAAC  
AATCATTGCATCGAACAGACCTGAATAGGAACCTTGTCTCCAACACTGGTGTGAGGAAGTGCATCCA  
GTTCTCATGCTCGAAACCTACTGTGGACTTTATCCTGAGTCAGAACCAGAAGTGAAGGCAGTGGCTAG  
TTTCTTGAGAAGAAATATCAACCAGATTAAGCATACATCAGCATGCATTCATACTCCAGCATATAGTG  
TTTCATATTCCTATACACGAAGTAAAAGCAAAGACCATGAGGAACTGTCTCTAGTAGCCAGTGAAGCAG  
TTCGTGCTATTGAGAAAATTAGTAAAAATACCAGGTATACACATGGCCATGGCTCAGAAACCTTATACCT  
AGCTCCTGGAGGTGGGACGATTGGATCTATGATTTGGGCATCAAATATTCGTTTACAATTGAACCTCGA  
GATACGGGCACATACGGATTCTTGCTGCCGGAGCGTTACATCAAACCCACCTGTAGAGAAGCTTTTGCCG  
CTGTCTCTAAAAAGCTTGGCATGTCATTAGGAATGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237896 representing NM\_001278541  
Red=Cloning site Green=Tags(s)

MKLCSLAVLVPIVLFCEQHVFAFQSGQVLAALPRTSRQVQLQNLTTTYEIVLWQPVTADLIVKKKQVHF  
 FVNASDVNDVKAHLNVSGIPCSVLLADVEDLIQQQISNDTVSPRASASYEQYHSLNEIYSWIEFITERH  
 PDMLTKIHIIGSSFEKYPLYVLKVSQKEQAANKNAIWIDCGIHAREWISPAFCLWFIGHNRMWRKNRSFYAN  
 NHCIGTDLNRNFASKHWCEEASSSSCSEYCYGLYPESEPEVKAVASFLRRNINQIKAYISMHSYSQHIV  
 FPYSYTRSKSKDHEELSLVASEAVRAIEKISKNTRYTHGHGSETLYLAPGGDDWIYDLGIKYSFTIELR  
 DTGTYGFLLPERYIKPTCREAFAAVSKIAWHVIRNV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

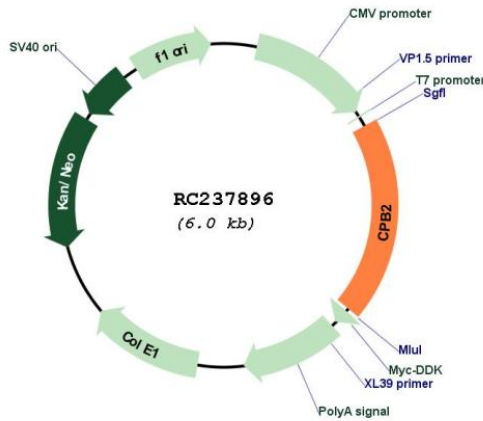
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001278541

<b>ORF Size:</b>	1158 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_001278541.1</a> , <a href="#">NP_001265470.1</a>
<b>RefSeq Size:</b>	1655 bp
<b>RefSeq ORF:</b>	1161 bp
<b>Locus ID:</b>	1361
<b>UniProt ID:</b>	<a href="#">Q96IY4</a>
<b>Cytogenetics:</b>	13q14.13
<b>Protein Families:</b>	Druggable Genome, Protease, Secreted Protein
<b>Protein Pathways:</b>	Complement and coagulation cascades
<b>MW:</b>	44.5 kDa
<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]