

## Product datasheet for **SC313122**

### Carboxypeptidase B2 (CPB2) (NM\_016413) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase B2 (CPB2) (NM_016413) Human Untagged Clone
Tag:	Tag Free
Symbol:	Carboxypeptidase B2
Synonyms:	CPU; PCPB; TAFI
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_016413 edited  
 ATTGCTGTTGGGATGAAGCTTTGCAGCCTTGCAAGTCCCTGTACCCATTGTTCTCTCTGT  
 GAGCAGCATGTCTTCGCGTTTCAGAGTGGCCAAGTTCTAGCTGCTTTCCTAGAACCTCT  
 AGGCAAGTTCAAGTTCTACAGAATCTTACTACAACATATGAGATTGTTCTCTGGCAGCCG  
 GTAACAGCTGACCTTATTGTGAAGAAAAACAAGTCCATTTTTTTGTAATGCATCTGAT  
 GTCGACAATGTGAAAGCCATTTAAATGTGAGCGGAATCCATGCAGTGTCTTGCTGGCA  
 GATGTGGAAGATCTTATTCAACAGCAGATTTCCAACGACACAGTCAGCCCCGAGCCTCC  
 GCATCGTACTATGAACAGTATCACTCACTAAATGAAATCTATTCTTGGATAGAATTTATA  
 ACTGAGAGGCATCCTGATATGCTTACAAAAATCCACATTGGATCCTCATTGAGAAGTAC  
 CCACTCTATGTTTTAAAGGTTTCTGAAAAGAACAAGCAGCCAAAAATGCCATATGGATT  
 GACTGTGGAATCCATGCCAGAGAATGGATCTCTCCTGCTTCTGCTTGTGGTTCATAGGC  
 CATAATCGAATGTGGAGAAAGAACCCTTTCTATGCGAACAATCATTGCATCGGAACA  
 GACCTGAATAGGAACTTTGCTTCCAAACTGGTGTGAGGAAGGTGCATCCAGTTCCTCA  
 TGCTCGGAAACCTACTGTGGACTTTATCCTGAGTCAGAACCAGAAGTGAAGGCAGTGGCT  
 AGTTTCTTGAGAAGAAATATCAACCAGATTAAGCATACATCAGCATGCATTCATACTCC  
 CAGCATATAGTGTTCATATTCCTATACACGAAGTAAAAGCAAAGACCATGAGGAACTG  
 TCTCTAGTAGCCAGTGAAGCAGTTCGTGCTATTGAGAAAAGTAAAAATACCAGGTAT  
 ACACATGGCCATGGCTCAGAAACCTTATACCTAGCTCCTGGAGGTGGGGACGATTGGATC  
 TATGATTTGGGCATCAAATATTCCGTTACATCAAACCCACCTGTAGAGAAGCTTTTGCCG  
 CTGTCTCTAAAAATAG

Restriction Sites:	Please inquire
ACCN:	NM_016413
Insert Size:	1200 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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>	<u><a href="#">NM_016413.2</a></u> , <u><a href="#">NP_057497.2</a></u>
<b>RefSeq Size:</b>	1560 bp
<b>RefSeq ORF:</b>	1083 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>	<p>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]</p> <p>Transcript Variant: This variant (2) lacks two segments in the coding region when compared to variant 1. The absence of the second segment causes a frameshift; therefore, isoform b lacks an internal aa fragment and has a distinct C-terminus when compared to isoform a.</p>