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Product datasheet for RC218711

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:	Myc-DDK
Symbol:	Carboxypeptidase B2
Synonyms:	CPU; PCPB; TAFI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218711 representing NM_016413 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAAGCTTTGCAGCCTTGCAGTCCTTGTACCCATTGTTCTCTTCTGTGAGCAGCATGTCTTCGCGTTTC AGAGTGGCCAAGTTCTAGCTGCTCTTCCTAGAACCTCTAGGCAAGTTCAAGTTCTACAGAATCTTACTAC AACATATGAGATTGTTCTCTGGCAGCCGGTAACAGCTGACCTTATTGTGAAGAAAAAACAAGTCCATTTT TTTGTAAATGCATCTGATGTCGACAATGTGAAAGCCCATTTAAATGTGAGCGGAATTCCATGCAGTGTCT TGCTGGCAGATGTGGAAGATCTTATTCAACAGCAGATTTCCAACGACACAGTCAGCCCCCGAGCCTCCGC ATCGTACTATGAACAGTATCACTCACTAAATGAAATCTATTCTTGGATAGAATTTATAACTGAGAGGCAT CCTGATATGCTTACAAAAATCCACATTGGATCCTCATTTGAGAAGTACCCACTCTATGTTTTAAAGGTTT CTGGAAAAGAACAAGCAGCCAAAAATGCCATATGGATTGACTGTGGAATCCATGCCAGAGAATGGATCTC TCCTGCTTTCTGCTTGTGGTTCATAGGCCATAATCGAATGTGGAGAAAGAACCGTTCTTTCTATGCGAAC AATCATTGCATCGGAACAGACCTGAATAGGAACTTTGCTTCCAAACACTGGTGTGAGGAAGGTGCATCCA GTTCCTCATGCTCGGAAACCTACTGTGGACTTTATCCTGAGTCAGAACCAGAAGTGAAGGCAGTGGCTAG TTTCTTGAGAAGAAATATCAACCAGATTAAAGCATACATCAGCATGCATTCATACTCCCAGCATATAGTG TTTCCATATTCCTATACACGAAGTAAAAGCAAAGACCATGAGGAACTGTCTCTAGTAGCCAGTGAAGCAG TTCGTGCTATTGAGAAAATTAGTAAAAATACCAGGTATACACATGGCCATGGCTCAGAAACCTTATACCT AGCTCCTGGAGGTGGGGACGATTGGATCTATGATTTGGGCATCAAATATTCGTTTACATCAAACCCACCT GTAGAGAAGCTTTTGCCGCTGTCTCTAAAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC218711 representing NM_016413
Red=Cloning site Green=Tags(s)

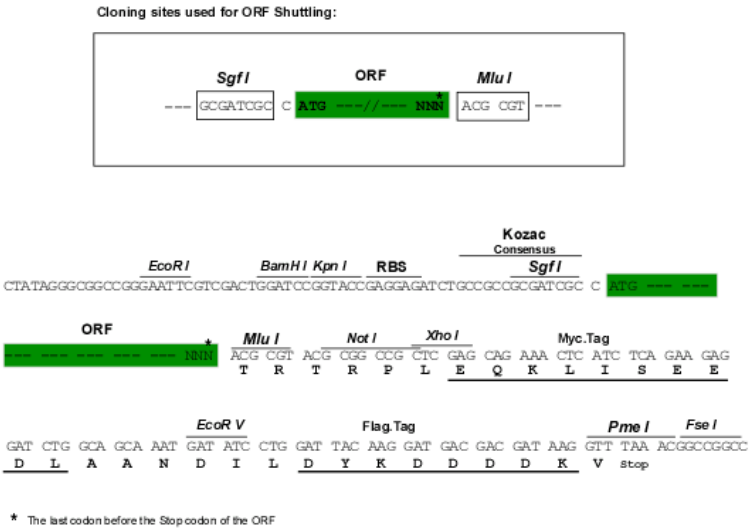
MKLCSLAVLVPIVLFCEQHVFAFQSGQVLAALPRTSRQVQVLQNLTTTYEIVLWQPVTADLIVKKKQVHF
FVNASDVDNVKAHLNVSGIPCSVLLADVEDLIQQQISNDTVSPRASASYYEQYHSLNEIYSWIEFITERH
PDMLTKIHIGSSFEKYPLYVLKVSGKEQAAKNAIWIDCGIHAREWISPAFCLWFIGHNRMWRKNRSFYAN
NHCIGTDLNRNFASKHWCEEGASSSSCSETYCGLYPESEPEVKAVASFLRRNINQIKAYISMHSYSQHIV
FPYSYTRSKSKDHEELSLVASEAVRAIEKISKNTRYTHGHGSETLYLAPGGGDDWIYDLGIKYSFTSNPP
VEKLLPLSLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8009_d12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016413

ORF Size: 1080 bp

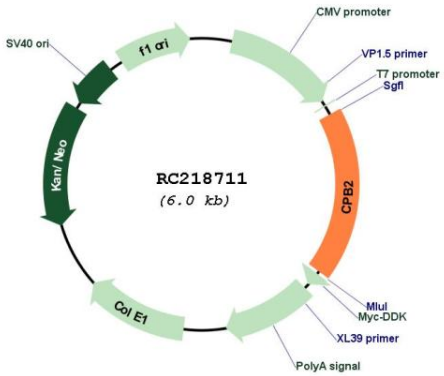
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

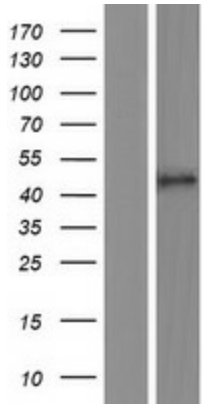
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
RefSeq:	NM_016413.2, NP_057497.2
RefSeq Size:	1560 bp
RefSeq ORF:	1082 bp
Locus ID:	1361
Cytogenetics:	13q14.13
Domains:	Zn_carbOpept, Propep_M14
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Complement and coagulation cascades
MW:	40.7 kDa
Gene Summary:	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]

Product images:



Circular map for RC218711



Western blot validation of overexpression lysate (Cat# [LY414007]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218711 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).