

Product datasheet for RC204463

Carboxypeptidase B (CPB1) (NM_001871) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase B (CPB1) (NM_001871) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Carboxypeptidase B
Synonyms:	CPB; PASP; PCPB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204463 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGGCACTCTTGGTTCTGGTACTGTGGCCCTGGCATCTGCTCATCATGGTGGTGAGCACTTTGAAG
GCGAGAAGGTGTTCCGTGTTAACGTTGAAGATGAAAATCACATTAACATAATCCGCGAGTTGGCCAGCAC
GACCCAGATTGACTTCTGGAAGCCAGATTCTGTCACACAAATCAAACCTCACAGTACAGTTGACTCCGT
GTTAAAGCAGAAGATACTGTCACTGTGGAGAATGTTCTAAAGCAGAATGAACTACAATACAAGTACTGA
TAAGCAACCTGAGAAATGTGGTGGAGGCTCAGTTTGATAGCCGGTTCGTGCAACAGGACACAGTTATGA
GAAGTACAACAAGTGGGAAACGATAGAGGCTTGGACTCAACAAGTCGCCACTGAGAATCCAGCCCTCATC
TCTCGCAGTGTTATCGGAACACATTTGAGGGACGCGCTATTTACCTCCTGAAGGTTGGCAAAGCTGGAC
AAAATAAGCCTGCCATTTTCATGGACTGTGGTTTCCATGCCAGAGAGTGGATTTCTCCTGCATTCTGCCA
GTGGTTTGTAAAGAGAGGCTGTTTCGTACCTATGGACGTGAGATCCAAGTGACAGAGCTTCTCGACAAGTTA
GACTTTTATGTCTGCCTGTGCTCAATATTGATGGCTACATCTACACCTGGACCAAGAGCCGATTTTGA
GAAAGACTCGCTCCACCATACTGGATCTAGCTGCATTGGCACAGACCCCAACAGAAATTTGATGCTGG
TTGGTGTGAAATTGGAGCCTCTCGAAACCCCTGTGATGAACTTACTGTGGACCTGCCCGAGAGTCTGAA
AAGGAGACCAAGGCCCTGGCTGATTTTCATCCGCAACAACTCTTCCATCAAGGATATCTGACAATCC
ACTCGTACTCCCAAATGATGATCTACCCTTACTCATATGCTTACAACTCGGTGAGAACAATGCTGAGTT
GAATGCCCTGGCTAAAGCTACTGTGAAAGAAGTTCCTCACTGCACGGCACCAAGTACACATATGGCCCG
GGAGCTACAACAATCTATCCTGCTGCTGGGGCTCTGACGACTGGGCTTATGACCAAGGAATCAGATATT
CCTTACCTTTGAACTTCGAGATACAGGCAGATATGGCTTTCTCCTTCCAGAATCCAGATCCGGGCTAC
CTGCGAGGAGACCTTCTGGCAATCAAGTATGTTGCCAGTACGCTCCTGGAACACCTGTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204463 protein sequence
Red=Cloning site Green=Tags(s)

MLALLVLVTVALASAHGGEHFEGEKVFRVNVEDENHINI IRELASTTQIDFWKPD SVTQIKPHSTVDFR
VKAEDTVTVENVLKQNELQYKVLISNL RNVVEAQFDSRVRATGHSY EKYNKWETIEAWTQQVATENPALI
SRSVIGTTFEGRAIYLLKVGKAGQNKPAIFMDCGFHAREWISPAFCQWFVREAVR TYGREIQVTELLDKL
DFYVLPVLNIDGYIYTWKSRFWRKTRSTHTGSSCI GTPNRF DAGWCEIGASRNPCDETYCGPAAESE
KETKALADFIRNKLSSIKAYLTIHSYSQMMIYPYSYAYKLGENNAELNALAKATVKELASLHGTKYTYGP
GATTIYPAAGSDDWAYDQGIRYSFTFELRDTGRYGFLLPESQIRATCEETF LAIKYVASVYLEHLY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6311_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001871

ORF Size: 1251 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_001871.3](#)

RefSeq Size: 1473 bp

RefSeq ORF: 1254 bp

Locus ID: 1360

UniProt ID: [P15086](#)

Cytogenetics: 3q24

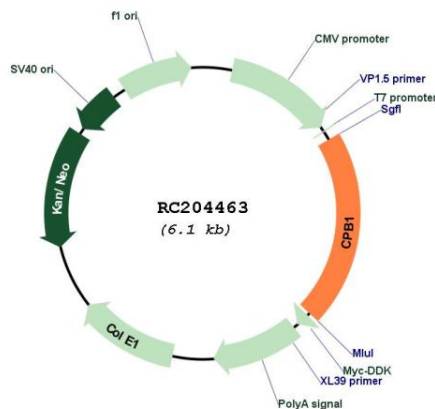
Domains: Zn_carbOpept, Propep_M14

Protein Families: Druggable Genome, Protease, Secreted Protein

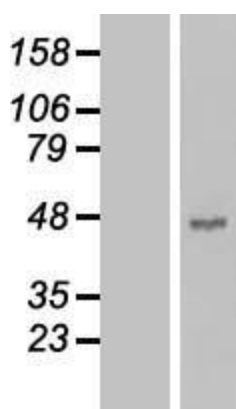
MW: 47.4 kDa

Gene Summary: Three different procarboxypeptidases A and two different procarboxypeptidases B have been isolated. The B1 and B2 forms differ from each other mainly in isoelectric point. Carboxypeptidase B1 is a highly tissue-specific protein and is a useful serum marker for acute pancreatitis and dysfunction of pancreatic transplants. It is not elevated in pancreatic carcinoma. [provided by RefSeq, Jul 2008]

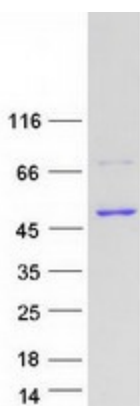
Product images:



Circular map for RC204463



Western blot validation of overexpression lysate (Cat# [LY419699]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204463 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CPB1 protein (Cat# [TP304463]). The protein was produced from HEK293T cells transfected with CPB1 cDNA clone (Cat# RC204463) using MegaTran 2.0 (Cat# [TT210002]).