

## Product datasheet for **RC218835**

### Carboxypeptidase Z (CPZ) (NM\_001014447) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase Z (CPZ) (NM_001014447) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CPZ
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC218835 representing NM\_001014447  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCGCCCCCGCCCGCTGCTCCTTACAGTCTGGTCTGCGCCGCTGCCCGCCGGGGTGGCAGT  
 TTGAGCGGAACCCCGCCGGTGAATGCCACAGGCCACCAGCTGCAGACAGCGCCACCTGCGTGGACCTGCA  
 GCTCAGGACCTGCAGCGATGCCGCTACAACCACACCACCTTCCCCAACCTGCTTCAGCACCGGTGCTGG  
 GAGGTGGTGGAGGCCAGCTCCGAGTACATCCTGCTGAGCGTTCTACACCAGCTCCTGGAAGGCCAGTGCA  
 ACCCGGACCTGCGGCTGCTGGGCTGTGCTGTGCTGGCCCCCGGTGTGAGGGCGGCTGGGTGCGCAGACC  
 CTGCCGGCACATCTGCGAGGGCCTGCGGGAGGTCTGCCAGCCCGCCTTCGACGCCATTGACATGGCCTGG  
 CCCTACTTCTTGACTGCCACCGCTACTTCACGAGAGAGGACGAGGGCTGCTATGACCCGCTGGAGAAGC  
 TTCGGGGAGGCCGAGGCTGACGAGGCACTGCCCTCAGGGCTGCCGCCACCTTCATCCGCTTCAGCCA  
 CCACTCCTACGCCAGATGGTGCCTGTGCTGAGGCGGACGGCCTCCCGCTGCGCCACGTTGCCAGGACC  
 TACAGCATCGGGCGCAGCTTCGACGGCAGGAGCTGCTGGTTCATCGAGTTCTCCAGCCGCCCGGCCAGC  
 ACGAGCTGATGGAGCCCAGGTGAAGCTCATCGGCAACATTCATGGCAACGAGGTGGCGGGCCGGGAGAT  
 GCTCATCTACCTAGCCCAGTACCTGTGCTCTGAGTACCTGCTTGGTAACCCCGCATCCAGCGCCTGCTC  
 AACACCACCCGCATCCACCTGCTGCCCTCCATGAACCCTGACGGCTATGAGGTGGCAGCTGCCGAGGGTG  
 CCGGCTACAACGGGTGGACGAGCGGGAGGCAGAACCGGCAGAACCTGGATCTGAACCGAAATTTCCCGGA  
 CCTGACGTCAGTACTACCGGCTGGCGGAGACCCGCGGCACGCAGCGACCACATCCCCATCCCCAG  
 CACTACTGGTGGGTAAAGTGGCCCCGAGACAAAGCAATCATGAAGTGGATGCAGACCATACCCCTTGG  
 TGCTCTCAGCCAGCCTTCATGGGGCGACCTGGTGGTGTCTACCCCTTCGACTTCTCAAGCACCCCA  
 GGAGGAGAAGATGTTTTCTCCACGCCCGACGAGAAGATGTTCAAGCTGCTGTCCAGAGCCTACGCTGAC  
 GTCCACCCCATGATGATGGACAGGTGCGAGAATAGGTGTGGAGGCAATTCCTGAAGAGGGGGAGCATCA  
 TCAACGGGGCGGACTGGTACAGCTTCACGGGAGGCATGTCCGATTTCAACTACCTGCACACCAACTGCTT  
 TGAGATCACGGTAGAGCTGGGCTGTGTGAAGTTCACCCCGAGGAGGCCCTGTACACACTCTGGCAGCAC  
 AACAGGAGTCACTCCTGAATTCGTGGAGACGGTGCACCGGGCATCAAAGGTGTGGTACAGATAAAT  
 TCGGCAAGCCAGTCAAAAACGCCCGGATCTCAGTCAAAGGCATTCGCCACGACATCACCACAGCCCCAGA  
 TGGTGACTACTGGAGACTGCTGCCCCAGGTATCCACATTGCTATTGCCAAGCCCTGGCTACGCCAAA  
 GTCATCAAGAAAGTCATCATCCCGCCCGGATGAAGAGGGCTGGCCGTGTGGACTTATTCTGCAACCTC  
 TGGGGATGGGACCAAGAACTTTATTATGGGCTGCGGAGGACTGGGCCACGACCCGCTGGGAGGTGC  
 CAGCTCTTTGGGGGAGGCCACGGAGCCCGACCCGCTCCGGGCGCGCAGGACGCCCTCGGCCGACGGGAGT  
 AAGCCCTGGTGGTGGTCTACTTCACATCGCTGAGCACCCACAGGCCACGCTGGCTGCTCAAGTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC218835 representing NM\_001014447  
 Red=Cloning site Green=Tags(s)

MPPPPPLLLLTVLVVAAARPGCEFERNPAGECHRPPAADSATCVDLQLRTCSDAAYNHTTFPNLLQHRSE  
 EVVEASSEYILLSVLHQLLEGCNPDLRLLGCAVLAPRCEGGWRRPCRHICEGLREVCQPAFDAIDMAW  
 PYFLDCHRYFTREDEGCYDPLEKLRGGLEADEALPSGLPPTFIRF SHHSYAQMVRVLRRTASRCAHVART  
 YSIGRSFDGRELLVIEFSSRPGQHELMEPEVKLIGNIHGNEVAGREMLIYLAQYLCSEYLLGNPRIQRLL  
 NTTRIHLPSMNPDGYEVAEEAGAGYNGWTSGRQNAQNLDLNRNFPDLTSEYYRLAETRGRSDHIPIQ  
 HYWVGKVAPETKAIMKWMQTIPIVLSASLHGGDLVVSYPDFSKHPQEEKMFSPTPDEKMFKLLSRAYAD  
 VHPMMDRSENRCGNFLKRSIINGADWYSFTGGMSDFNYLHTNCFEITVELGCVKFPPEEALYTLWQH  
 NKESLLNFVETVHRGIKGVVTDKFKGPKVNARISVKIRHDITTPDGDYWRLLPPGIHIVIAQAPGYAK  
 VIKKVIIPARMKRAGRVDFILQPLGMGPKNFIHGLRRTGPHDPLGGASSLGEATEPDPLRARRQPSADGS  
 KPWWWSYFTSLSTHRPRWLLKY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

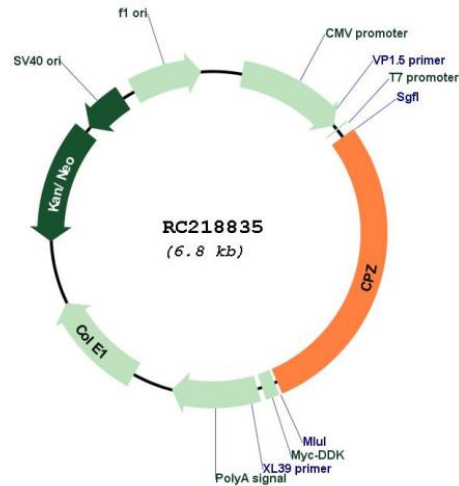
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



## Plasmid Map:



**ACCN:** NM\_001014447

**ORF Size:** 1956 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:	<u>NM_001014447.2, NP_001014447.1</u>
RefSeq Size:	2292 bp
RefSeq ORF:	1959 bp
Locus ID:	8532
UniProt ID:	<u>Q66K79</u>
Cytogenetics:	4p16.1
Protein Families:	Druggable Genome, Protease, Secreted Protein
MW:	73.6 kDa
Gene Summary:	This gene encodes a member of the metalloproteinase family. This enzyme displays carboxypeptidase activity towards substrates with basic C-terminal residues. It is most active at neutral pH and is inhibited by active site-directed inhibitors of metalloproteinases. Alternative splicing in the coding region results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]