

Product datasheet for RC224582

Carboxypeptidase M (CPM) (NM_001874) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxypeptidase M (CPM) (NM_001874) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Carboxypeptidase M
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224582 representing NM_001874 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACTTCCCGTGCCTCTGGCTAGGGCTGTTGCTGCCTTTGGTAGCTGCGCTGGATTTCAACTACCACC
GCCAGGAAGGGATGGAAGCGTTTTTGAAGACTGTTGCCAAAACACTACAGTTCTGTCACTCACTTACACAG
TATTGGGAAATCTGTGAAAGGTAGAAACCTGTGGGTTCTTGTGGGGCGGTTTCCAAAGGAACACAGA
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TCCATCTGATTGACTATCTCGTAACCAAGTATGGCAAAGACCCTGAAATCACAAATCTGATCAATAGTAC
CCGGATACACATCATGCCTTCCATGAACCCAGATGGATTTGAAGCCGTCAAAAAGCCTGACTGTTACTAC
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AAACCTCCATGGTGGTGCCTCGTGGCCAGTTACCCATTTGATAATGGTGTTCAGCAACTGGGGCATT
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TAATTGAATATATAAGCAGGTGCACCTAGGTGTAAAGGGTCAAGTTTTTATGATCAGAATGGAAATCCATT
ACCCAATGTAATTTGTGGAAGTCCAAGACAGAAAACATATCTGCCCTATAGAACCAACAAATATGGAGAG
TATTATCTCCTTCTTGGCTGGTCTATATAATAAATGTTACAGTCCCTGGACATGATCCACACATCA
CAAAGGTGATTATCCGGAGAAATCCCAGAACTCAGTGTCTTAAAAAGGATATTCTACTTCCATTCCA
AGGGCAATTGGATTCTATCCCAGTATCAAATCCTTCATGCCCAATGATTCCTCTATACAGAAATTTGCCA
GACCACTAGCTGCAACAAAGCCTAGTTTGTCTTATTTTTAGTGAGTCTTTGCACATATCTTCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224582 representing NM_001874
Red=Cloning site Green=Tags(s)

MDFPCLWLGLLLPLVAALDFNYHRQEGMEAF LKTVAQNYSSVTHLHSIGKSVKGRNLWLVVGRFPKEHR
 IGIPFKYVANMHGDETVGRELLHLIDYLVTS DGK DPEITNLINSTRIHIMPSPMPDGF EAVKKPDCYY
 SIGREYNQYDLNRNFPDAFEYNNVSRQPETVAVMKWLKTET FVLSANLHGGALVASYPFDNGVQATGAL
 YSRSLTPDDDFQYLAHTYASRNPNMKKGDECKNKMNF PNGVTNGYSWYPLQGGMQDYNYIWAQCFEITL
 ELSCKYPREEKLPSFWNNKASLIEYIKQVHLGVKGVFDQNGNPLPNVIVEVQDRKHICPYRTNKYGE
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 DHSAA TKPSLFLFLVSL LHIFFK

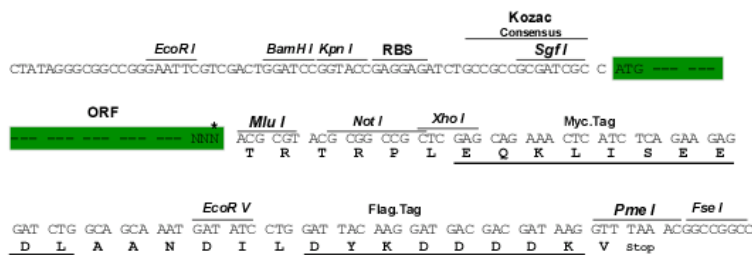
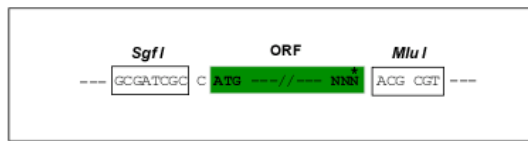
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6119_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001874

ORF Size: 1329 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_001874.4](#)

RefSeq Size: 6683 bp

RefSeq ORF: 1332 bp

Locus ID: 1368

UniProt ID: [P14384](#)

Cytogenetics: 12q15

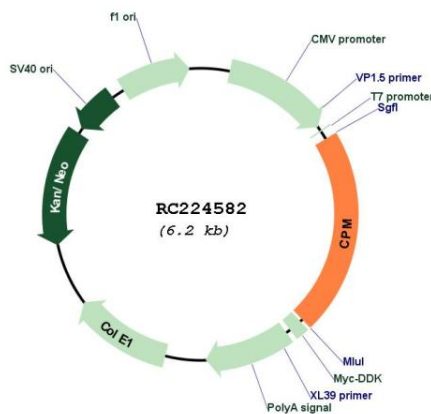
Domains: Zn_carbOpept

Protein Families: Druggable Genome, Protease

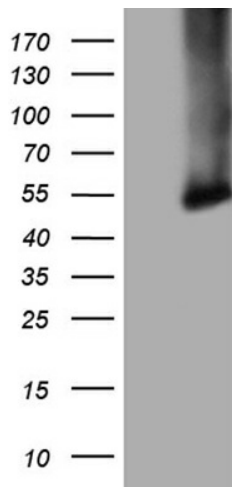
MW: 50.51 kDa

Gene Summary: The protein encoded by this gene is a membrane-bound arginine/lysine carboxypeptidase. Its expression is associated with monocyte to macrophage differentiation. This encoded protein contains hydrophobic regions at the amino and carboxy termini and has 6 potential asparagine-linked glycosylation sites. The active site residues of carboxypeptidases A and B are conserved in this protein. Three alternatively spliced transcript variants encoding the same protein have been described for this gene. [provided by RefSeq, Jul 2008]

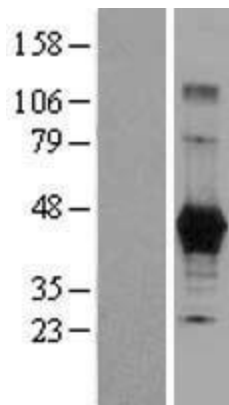
Product images:



Circular map for RC224582



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CPM (Cat# RC224582, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CPM (Cat# [TA807364])(1:2000). Positive lysates [LY400704] (100ug) and [LC400704] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400704]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224582 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).