

## Product datasheet for **MR226559**

### Cpe (NM\_013494) Mouse Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                                      |
| Product Name:             | Cpe (NM_013494) Mouse Tagged ORF Clone                   |
| Tag:                      | Myc-DDK  |
| Symbol:                   | Cpe  |
| Synonyms:                 | CP; CPH; Cph-; Cph-1; Cph1; fat; NF-a; NF-alpha1; R74677 |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-Entry (PS100001)                                   |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                     |



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**ORF Nucleotide Sequence:**

>MR226559 representing NM\_013494  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGGGCGCGGAGGACGGGTGCTGCTGGCGCTGTGTGCCGCGCTGGTGGCCGGCGGGTGGCTGCTGA  
 CGGCTGAAGCCCAGGAGCCCGGGGCGCCAGCGGCTGGCATGAGGCGCCGCGCGGCTCCAGCAAGAGGA  
 CGGCATCTCCTTCGAGTACCACCCTATCCAGAGCTGCGCGAGGCGCTGGTGTCCGTATGGCTGCAGTGC  
 ACCGCCATCAGCAGAATCTACACAGTGGGGCGCAGCTTCGAGGGCCGGGAGCTCCTGGTCATCGAGCTGT  
 CTGACAACCCCGGGTCCATGAGCCGGGTGAACCTGAATTTAAATACATTGGGAACATGCATGGTAATGA  
 GGCGGTTGGACGGGAAGTGTATTTTTCTGGCCAGTACCTGTGAACGAGTACCAGAAAGGCAATGAG  
 ACAATTGTCAACCTGATCCACAGCACCCGAATTCATATCATGCCCTCCTGAACCCCGACGGCTTTGAGA  
 AAGCCGCATCGCAGCCCGCGAGCTGAAGGACTGGTTTGTGGCCGCGAGCAACGCCAGGGAATAGATCT  
 GAACCGTAACCTCCAGACCTGGACAGGATCGTGTATGTTAATGAGAAAGAAGGCGGTCTAACAATCAC  
 CTGCTGAAGAATCTGAAGAAAATTTGGACAAAATTCAAAGCTTGCCCCGAGACCAAGGCTGTCAATC  
 ACTGGATCATGGACATTCATTTGTGCTTTCTGCCAATCTGCACGGAGGAGACCTTGTGGCTAATTACCC  
 ATATGATGAGACACGGAGCGGACTGCTCACGAATACAGTTTCTGCCCTGATGACGCAATTTTCAAAGC  
 TTGGCTCGCGCTACTCTTTTCAACCCAGTCATGTCTGACCCCAATCGACCTCCCTGTGCAAGAATG  
 ACGATGACAGCAGCTTTGTAGATGGAACGACCAATGGTGGTGCATGGTACAGCGTCCCGGTGGAATGCA  
 AGACTTCAATTACCTGAGCAGCAACTGCTTCGAGATCACTGTGGAGCTTACCTGTGAGAAGTTCCACCC  
 GAAGAGACTCTAAAAGCTACTGGAAGATAACAAAACTCCCTCATCAGCTACCTGGAGCAGATACACC  
 GAGGTGTTAAAGGTTTGTCCGTGACCTCAGGGTAACCCGATTGCCAACGCAACCATCTCTGTGGACGG  
 GATAGACCATGATGTACCTCGGCTAAGGATGGGGATTACTGGCGATTGCTTGCTCCTGGAAACTATAAA  
 CTTACAGCCTCCGCTCCTGGCTACCTGGCAATCACAAGAAAGTGGCAGTTCTTTTAGCCCTGCTGTTG  
 GGGTGGACTTTGAGCTTGAGTCTTTCTCTGAAAGGAAGGAGGAGGAGAAGGAAGAATTGATGGAGTGGT  
 GAAAATGATGTCAGAACTTTGAATTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR226559 representing NM\_013494  
 Red=Cloning site Green=Tags(s)

MAGRGRVLLALCAALVAGWLLTAEAQEPGAPAAAGMRRRRRLQQEDGISFEYHRYPELREALVSVWLQC  
 TAISRIYTVGRSFEGRELLVIELSDNPGVHEPGEPEFKYIGNMHGNEAVGRELLIFLAQYLCNEYQKQNE  
 TIVNLIHSTRIHIMPSPNPDGFEKAASQPGELKDFVGRSNAQIDLNRFNFDLDRIVYVNEKEGGPNNH  
 LLKNLKKIVDQNSKLAPETKAVIHWIMDIPFVLSANLHGGLVANYPYDETRSGTAHEYSSCPDDAIFQS  
 LARAYSSFNPVMSDPNRPCKNDSSFDVDTTNGGAWYSVPGMQDFNYLSSNCFEITVELSCEKFPF  
 EETLKSYPWEDNKNLSISYLEQIHRGVKGFVRDLQGNPIANATISVDGIDHDVTSKDGDIYWRLLAPGNYK  
 LTSAPGYLAITKKVAVPFSPAAGVDFELESFSEKKEEKEELMEWWMSETLNF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9008\\_c04.zip](https://cdn.origene.com/chromatograms/mm9008_c04.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_013494

ORF Size: 1428 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\\_013494.4](#), [NP\\_038522.2](#)

RefSeq Size: 2103 bp

RefSeq ORF: 1431 bp

Locus ID: 12876

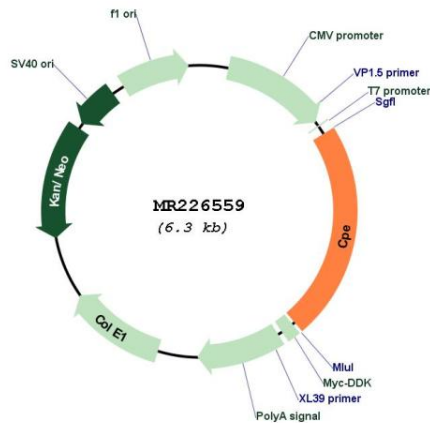
UniProt ID: [Q00493](#)

Cytogenetics: 8 32.3 cM

**MW:** 53.7 kDa

**Gene Summary:** This gene encodes carboxypeptidase E, a prohormone-processing exopeptidase found in secretory granules of endocrine and neuroendocrine cells. The encoded preproprotein undergoes proteolytic processing to generate a mature, functional enzyme that cleaves the C-terminal basic residues of protein substrates. A missense mutation in this gene is responsible for the obesity phenotype in a mouse model known as the "fat mouse." Mice lacking the functional product of this gene exhibit impaired processing of multiple peptide hormones such as proinsulin, prodynorphin, proneurotensin, promelanin-concentrating hormone and pro-opiomelanocortin. [provided by RefSeq, Jan 2016]

**Product images:**



Circular map for MR226559