

## Product datasheet for **MG226559**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cpe (NM_013494) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cpe
Synonyms:	CP; CPH; Cph-; Cph-1; Cph1; fat; NF-a; NF-alpha1; R74677
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG226559 representing NM\_013494  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGGGCGCGGAGGACGGGTGCTGCTGGCGCTGTGTGCCGCGCTGGTGGCCGGCGGGTGGCTGCTGA  
 CGGCTGAAGCCCAGGAGCCCGGGGCGCCAGCGGCTGGCATGAGGCGCCGCGCGGCTCCAGCAAGAGGA  
 CGGCATCTCCTTCGAGTACCACCCTATCCAGAGCTGCGCGAGGCGCTGGTGTCCGTATGGCTGCAGTGC  
 ACCGCCATCAGCAGAATCTACACAGTGGGGCGCAGCTTCGAGGGCCGGGAGCTCCTGGTCATCGAGCTGT  
 CTGACAACCCCGGGTCCATGAGCCGGGTGAACCTGAATTTAAATACATTGGGAACATGCATGGTAATGA  
 GGCGGTTGGACGGGAAGTCTTATTTTCTGGCCAGTACCTGTGAACGAGTACCAGAAAGGCAATGAG  
 ACAATTGTCAACCTGATCCACAGCACCCGAATTCATATCATGCCCTCCTGAACCCCGACGGCTTTGAGA  
 AAGCCGCATCGACCCCGCGAGCTGAAGGACTGGTTTGTGGCCGAGCAACGCCAGGGAATAGATCT  
 GAACCGTAACCTCCAGACCTGGACAGGATCGTGTATGTTAATGAGAAAGAAGGGCTCCTAACAAATCAC  
 CTGCTGAAGAATCTGAAGAAAATTTGGACAAAATTCAAAGCTTGCCCCGAGACCAAGGCTGTCAATC  
 ACTGGATCATGGACATTCATTTGTGCTTTCTGCCAATCTGCACGGAGGAGACCTTGTGGCTAATTACCC  
 ATATGATGAGACACGGAGCGGACTGCTCACGAATACAGTTTCTGCCCTGATGACGCAATTTTCAAAGC  
 TTGGCTCGCGCTACTCTTTTCAACCCAGTCATGTCTGACCCCAATCGACCTCCCTGTGCAAGAATG  
 ACGATGACAGCAGCTTTGTAGATGGAACGACCAATGGTGGTGCATGGTACAGCGTCCCGGTGGAATGCA  
 AGACTTCAATTACCTGAGCAGCAACTGCTTCGAGATCACTGTGGAGCTTACCTGTGAGAAGTTCCACCC  
 GAAGAGACTCTCAAAGCTACTGGAAGATAACAAAACTCCCTCATCAGCTACCTGGAGCAGATACACC  
 GAGGTGTTAAAGGTTTGTCCGTGACCTCAGGGTAACCCGATTGCCAACGCAACCATCTCTGTGGACGG  
 GATAGACCATGATGTACCTCGGCTAAGGATGGGGATTACTGGCGATTGCTTGTCTGGAAACTATAAA  
 CTTACAGCCTCCGCTCCTGGCTACCTGGCAATCACAAGAAAGTGGCAGTTCTTTTAGCCCTGCTGTTG  
 GGGTGGACTTTGAGCTTGTGCTTTCTCTGAAAGGAAGGAGGAGGAGAAGGAAGAATTGATGGAGTGGTG  
 GAAATGATGTCAGAACTTTGAATTTT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG226559 representing NM\_013494  
 Red=Cloning site Green=Tags(s)

MAGRGRVLLALCAALVAGWLLTAEAQEPGAPAAAGMRRRRRLQQEDGISFEYHRYPELREALVSVWLQC  
 TAISRIYTVGRSFEGRELLVIELSDNPGVHEPGEPEFKYIGNMHGNEAVGRELLIFLAQYLCNEYQKQNE  
 TIVNLIHSTRIHIMPSPNPDGFEKAASQPGELKDFVGRSNAQIDLNRNFPDLDRIVVYVNEKEGGPNNH  
 LLKLNKKIVDQNSKLAPETKAVIHWIMDIPFVLSANLHGGDLVANYPYDETRSGTAHEYSSCPDDAIFQS  
 LARAYSSFNPVMSDPNRPPCRKNDDSSFDGTTNGGAWYSVPGGMQDFNYLSSNCFEITVELSCEKFPF  
 EETLKSYPWEDNKNSLISYLEQIHRGVKGFVRDLQGNPIANATISVDGIDHDVTSAKDGDYWRLLAPGNYK  
 LTSAPGYLAITKKVAVPFSPAAGVDFELESFSEKKEEKEELMEWWMSETLNF

**TRTRPLE** – GFP Tag – V

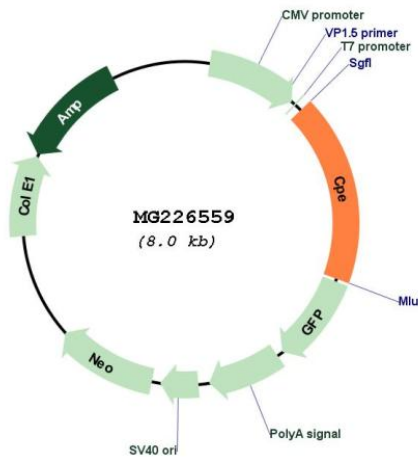
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



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

**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]