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# Product datasheet for RC207397

## CPA5 (NM_080385) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CPA5 (NM_080385) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | CPA5 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC207397 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGGGCACTCCTGGAGGCGGGACGCGCCCTGGGCCATCCCCCGTGGACAGGCGGACACTCCTGGTCT
TCAGCTTTATCCTGGCAGCAGCTTTGGGCCAAATGAATTTCACAGGGGACCAGGTTCTTCGAGTCCTGGC
CAAAGATGAGAAGCAGCTTTCACTTCTCGGGGATCTGGAGGGCCTGAAACCCCAGAAGGTGGACTTCTGG
CGTGGCCCAGCCAGGCCCAGCCTCCCTGTGGATATGAGAGTTCCTTTCTCTGAACTGAAAGACATCAAAG
CTTATCTGGAGTCTCATGGACTTGCTTACAGCATCATGATAAAGGACATCCAGGTGCTGCTGGATGAGGA
AAGACAGGCCATGGCGAAATCCCGCCGGCTGGAGCGCAGCACCAACAGCTTCAGTTACTCATCATACCAC
ACCCTGGAGGAGATATATAGCTGGATTGACAACTTTGTAATGGAGCATTCCGATATTGTCTCAAAAATTC
AGATTGGCAACAGCTTTGAAAACCAGTCCATTCTTGTCCTGAAGTTCAGCACTGGAGGTTCTCGGCACCC
AGCCATCTGGATTGACACTGGAATTCACTCCCGGGAGTGGATCACCCATGCCACCGGCATCTGGACTGCC
AATAAGATTGTCAGTGATTATGGCAAAGACCGTGTCCTGACAGACATACTGAATGCCATGGACATCTTCA
TAGAGCTCGTCACAAACCCTGATGGGTTTGCTTTTACCCACAGCATGAACCGCTTATGGCGGAAGAACAA
GTCCATCAGACCTGGAATCTTCTGCATCGGCGTGGATCTCAACAGGAACTGGAAGTCGGGTTTTGGAGGA
AATGGTTCTAACAGCAACCCCTGCTCAGAAACTTATCACGGGCCCTCCCCTCAGTCGGAGCCGGAGGTGG
CTGCCATAGTGAACTTCATCACAGCCCATGGCAACTTCAAGGCTCTGATCTCCATCCACAGCTACTCTCA
GATGCTTATGTACCCTTACGGCCGATCGCTGGATCCCGTTTCAAATCAGAGGGAGTTGTACGATCTTGCC
AAGGATGCGGTGGAGGCCTTGTATAAGGTCCATGGGATCGAGTACATTTTTGGCAGCATCAGCACCACCC
TCTATGTGGCCAGTGGGATCACCGTCGACTGGGCCTACGACAGTGGCATCAAGTACGCCTTCAGCTTTGA
GCTCCGGGACACTGGGCAGTATGGCTTCCTGCTGCCGGCCACACAGATCATCCCCACGGCCCAGGAGACG
TGGATGGCGCTTCGGACCATCATGGAGCACACCCTGAATCACCCCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:**

>RC207397 protein sequence
Red=Cloning site Green=Tags(s)

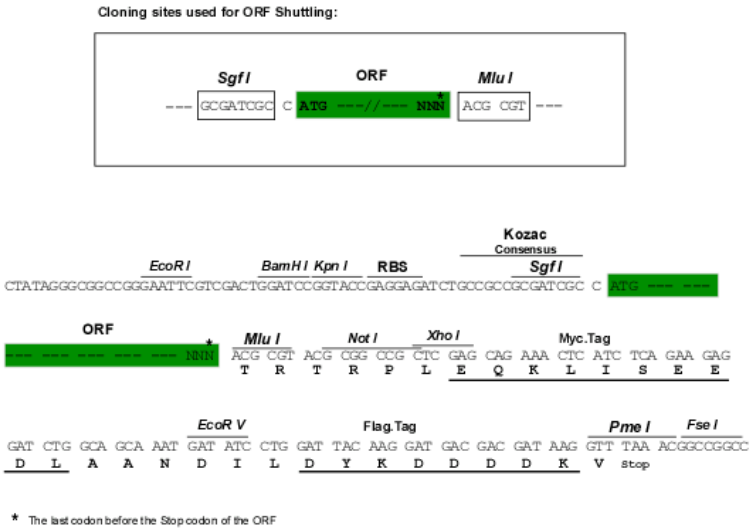
MQGTPGGGTRPGPSPVDRRTLLVFSFILAAALGQMNFTGDQVLRVLAKDEKQLSLLGDLEGLKPQKVDFW
RGPARPSLPVDMRVPFSELKDIKAYLESHGLAYSIMIKDIQVLLDEERQAMAKSRRLERSTNSFSYSSYH
TLEEIYSWIDNFVMEHSDIVSKIQIGNSFENQSILVLKFSTGGSRHPAIWIDTGIHSREWITHATGIWTA
NKIVSDYGKDRVLTDILNAMDIFIELVTNPDGFAFTHSMNRLWRKNKSIRPGIFCIGVDLNRNWKSGFGG
NGSNSNPCSETYHGPSPQSEPEVAAIVNFITAHGNFKALISIHSYSQMLMYPYGRSLDPVSNQRELYDLA
KDAVEALYKVHGIEYIFGSISTTLYVASGITVDWAYDSGIKYAFSFELRDTGQYGFLLPATQIIPTAQET
WMALRTIMEHTLNHPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6514_g08.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_080385

**ORF Size:** 1308 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_080385.3

**RefSeq Size:** 2078 bp

**RefSeq ORF:** 1311 bp

**Locus ID:** 93979

**UniProt ID:** Q8WXQ8

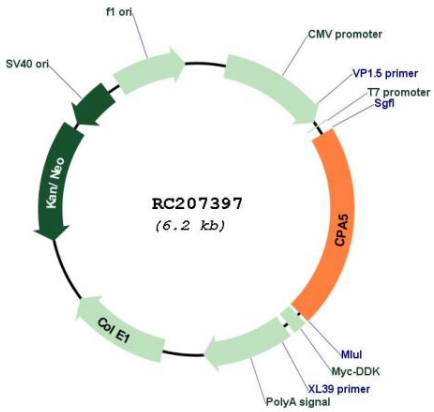
**Cytogenetics:** 7q32.2

**Protein Families:** Druggable Genome, Secreted Protein

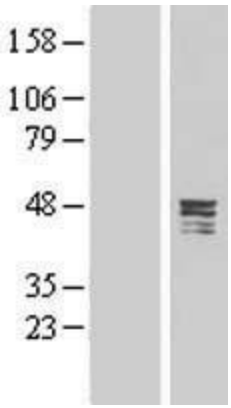
**MW:** 49 kDa

**Gene Summary:** Carboxypeptidases have functions ranging from digestion of food to selective biosynthesis of neuroendocrine peptides. Members of the A/B subfamily of carboxypeptidases, such as CPA5, contain an approximately 90-amino acid pro region that assists in the folding of the active carboxypeptidase domain. Cleavage of the pro region activates the enzyme (Wei et al., 2002 [PubMed 11836249]).[supplied by OMIM, Mar 2008]

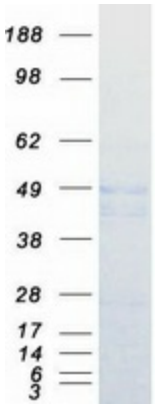
## Product images:




Circular map for RC207397




Western blot validation of overexpression lysate (Cat# [LY426784]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225716] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified CPA5 protein (Cat# [TP307397]). The protein was produced from HEK293T cells transfected with CPA5 cDNA clone (Cat# RC207397) using MegaTran 2.0 (Cat# [TT210002]).