

Product datasheet for **RC225630**

CPA5 (NM_001127442) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CPA5 (NM_001127442) 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:	>RC225630 representing NM_001127442 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGCAGGGCACCCCTGGAGGCGGGACGCGCCCTGGGCCATCCCCCGTGGACAGGCGGACACTCTGGTCTTCAGCTTTATCCTGGCAGCAGCTTTGGGCCAAATGAATTTACAGGGGACCAGGTTCTTCGAGTCTGGC
CAAAGATGAGAAGCAGCTTTCACTTCTCGGGATCTGGAGGGCCTGAAACCCAGAAGGTGGACTTCTGG
CGTGGCCAGCCAGGCCAGCCCTCCCTGTGGATATGAGAGTTCCTTTCTCTGAACTGAAAGACATCAAAG
CTTATCTGGAGTCTCATGGACTTGCTTACAGCATCATGATAAAGGACATCCAGGTGCTGGATGAGGA
AAGACAGGCCATGGCGAAATCCCGCCGGCTGGAGCGCAGCACCAACAGCTTCAGTTACTCATACCCAC
ACCCTGGAGGAGATATATAGCTGGATTGACAACTTTGTAATGGAGCATTCCGATATTGTCTCAAAAATTC
AGATTGGCAACAGCTTTGAAAACAGTCCATTCTTGCTCTGAAGTTCAGCACTGGAGGTTCTCGGCACCC
AGCCATCTGGATTGACACTGGAATTCCTCCCGGAGTGGATCACCCATGCCACCGGCATCTGGACTGCC
AATAAGATTGTCAGTGATTATGGCAAAGACCGTGTCTGACAGACATACTGAATGCCATGGACATCTTCA
TAGAGCTCGTCACAAACCCTGATGGGTTTGCTTTTACCCACAGCATGAACCGCTTATGGCGGAAGAACA
GTCCATCAGACCTGGAATCTTCTGCATCGGCGTGGATCTCAACAGGAAGTGAAGTGGGTTTTGGAGGA
AATGGTTCTAACAGCAACCCCTGCTCAGAACTTATCACGGGCCCTCCCCTCAGTCGGAGCCGGAGGTGG
CTGCCATAGTGAAGTTCATCACAGCCCATGGCACTTCAAGGCTCTGATCTCCATCCACAGCTACTCTCA
GATGCTTATGTACCCCTACGGCCGATTGCTGGAGCCGTTTTCAAATCAGAGGGAGTTGATGTGGCCAGTG
GGATCACCGTCGACTGGGCTATGACAGTGGCATCAAGTACGCCTTCAGCTTTGAGCTCCGGGACACTGG
GCAGTATGGCTTCTGCTGCCGGCCACACAGATCATCCCCACGGCCAGGAGACGTGGATGGCGCTTCGG
ACCATCATGGAGCACACCC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC225630 representing NM_001127442
 Red=Cloning site Green=Tags(s)

MQGTPGGGTRPGPSPVDRRTLLVFSFILAAALGQMNTGDQVLRVLAKDEKQLSLLGDLEGLKPQKVDFW
 RGPARPSLPVDMRVPFSELKDIKAYLESHGLAYSIMIKDIQVLLDEERQAMAKSRRLERSTNSFSYSSYH
 TLEEIYSWIDNFVMEHSDIVSKIQIGNSFENQSILVLFKSTGGSRHPAIWIDTGIHSREWITHTATGIWTA
 NKIVSDYGGKDRVLT DILNAMDIFIELVTNPDGFAFTHSMNRLWRKNKSIRPGIFCIGVDLNRNWKSGFGG
 NGSNSNPCSETYHGSPSQSEPEVAIVNFITAHGNFKALISHSYSQMLMYPYGRLLPEVSNQRELMWPV
 GSPSTGPMTVASSTPSALSSGTLGSMASCCRPHRSSPRRRRGWRFGPSWSTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8057_f01.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_001127442

ORF Size: 1209 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_001127442.2](#)

RefSeq ORF: 1212 bp

Locus ID: 93979

UniProt ID: [Q8WXQ8](#)

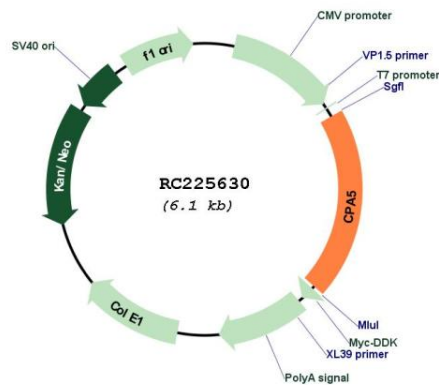
Cytogenetics: 7q32.2

Protein Families: Druggable Genome, Secreted Protein

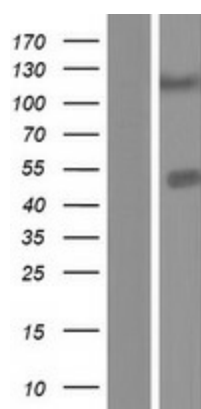
MW: 44.7 kDa

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 RC225630



Western blot validation of overexpression lysate (Cat# [LY426785]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225630 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).