

Product datasheet for **RC222109**

DPEP2 (NM_022355) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DPEP2 (NM_022355) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DPEP2
Synonyms:	MBD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC222109 representing NM_022355
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGCCCTCCGGCCTCGAGGGTCCCGGCACGTTTGGTCGGTGGCCTCTGCTGAGTCTGCTGCTCTCTG
 TGCTGCTGCTCCAGCCTGTAACCTGTGCCTACACCAGCCAGGCCCCAGAGCCCTACCACGCTGGG
 CGCCCCAGAGCCACACCATGCCGGGCACCTACGCTCCCTCGACCACACTCAGTAGTCCCAGCACCCAG
 GGCCTGCAAGAGCAGGCACGGGCCCTGATGCGGGACTTCCCGCTCGTGGACGGCCACAACGACTGCCCC
 TGGTCTAAGGCAGGTTTACCAGAAAGGGCTACAGGATGTTAACCTGCGCAATTTAGCTACGGCCAGAC
 CAGCCTGGACAGGCTTAGAGATGGCCTCGTGGCGCCAGTTCTGGTCAGCCTATGTGCCATGCCAGACC
 CAGGACCCGGATGCCCTGCGCCTCACCTGGAGCAGATTGACCTCATACGCCGATGTGTGCTCCTATT
 CTGAGCTGGAGCTTGTGACCTCGGCTAAAGCTCTGAACGACACTCAGAAATTGGCCTGCCTCATCGGTGT
 AGAGGGTGGCCACTCGCTGGACAATAGCCTCTCCATCTTACGTACCTTACATGCTGGGAGTGCCTAC
 CTGACGCTCACCCACACCTGCAACACACCTGGGCAGAGAGCTCCGCTAAGGGCGTCCACTCCTTCTACA
 ACAACATCAGCGGGCTGACTGACTTTGGTGAGAAGGTGGTGGCAGAAATGAACCGCTGGGCATGATGGT
 AGACTTATCCCATGTCTCAGATGCTGTGGCAGCGGGCCCTGGAAGTGTACAGGCACCTGTGATCTTC
 TCCCACTCGGCTGCCCGGGTGTGTGCAACAGTGTCTCGGAATGTTCTGATGACATCCTGCAGCTTCTGA
 AGAAGAACGGTGGCGTGTGATGGTGTCTTTGTCCATGGGAGTAAACAGTGCAACCCATCAGCCAAATGT
 GTCCACTGTGGCAGATCACTTCGACCACATCAAGGCTGTATTGGATCCAAGTTCATCGGGATTGGTGA
 GATTATGATGGGCGCGCAAATTCCTCAGGGGCTGGAAGACGTGTCCACATACCCGGTCTGATAGAGG
 AGTTGCTGAGTGTGGCTGGAGTGAGGAAGAGCTTCAGGGTGTCTTCTGTTGAAACCTGCTGGGCTCTT
 CAGACAAGTGAAAAGGTACAGGAAGAAAACAAATGGCAAAGCCCTTGGAGGACAAGTCCCGGATGAG
 CAGCTGAGCAGTTCCTGCCACTCCGACCTCTCACGTCTGCGTCAGAGACAGAGTCTGACTTCAGGCCAGG
 AACTCACTGAGATTCCCATACACTGGACAGCAAGTTACCAGCCAAGTGTGAGTCTCAGAGTCTCCCC
 CCACATGGCCCCAGTCTTGCAGTTGTGGCCACCTTCCAGTCTTATTCTGTGGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222109 representing NM_022355
 Red=Cloning site Green=Tags(s)

MQPSGLEPGTFGRWPLLSLLLLLLLQPVTCAITTPGPPRALTTLGAPRAHTMPGTYPSTLLSSPSTQ
 GLQEQARALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYGQTSLDRLRDGLVGAQFWSAYVPCQT
 QDRDALRLTLEQIDLIRRMCAYSLELVTSAKALNDTQKLAELIGVEGGHSLDNLISILRTFYMLGVRY
 LTLTHTCNTPWAESSAKGVHSFYNNISGLTDFGEKVVAEMNRLGMMVDLSHVSDAVARRALEVSQAPVIF
 SHSAARGVCNSARNVPDDILQLLKNNGGVVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGG
 DYDGAGKFPQGLEDVSTYPVLEIELLSRGWSEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDE
 QLSSSCHSDLSRLRQRQSLTSGQELTEIPIHWTAKLPAKWSVSESSPHMAPVLAVVATFPVLIWL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8116_e04.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_022355

ORF Size: 1458 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_022355.4](#)
RefSeq Size: 1781 bp

RefSeq ORF: 1461 bp

Locus ID: 64174

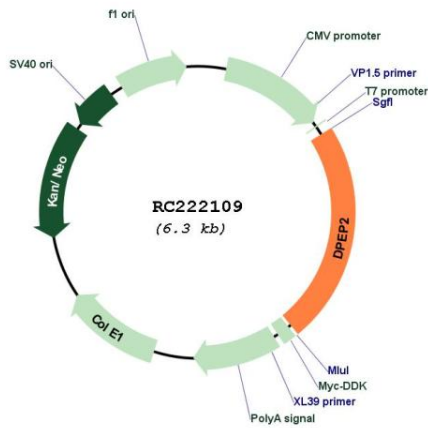
UniProt ID: [Q9H4A9](#)
Cytogenetics: 16q22.1

Protein Families: Druggable Genome, Protease

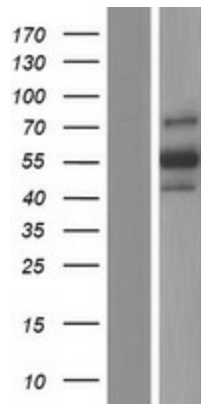
MW: 53.4 kDa

Gene Summary: DPEP2 belongs to the membrane-bound dipeptidase (EC 3.4.13.19) family. These enzymes hydrolyze a variety of dipeptides, including leukotriene D4, the beta-lactam ring of some antibiotics, and cystinyl-bis-glycine (cys-bis-gly) formed during glutathione degradation (Habib et al., 2003 [PubMed 12738806]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC222109



Western blot validation of overexpression lysate (Cat# [LY411681]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222109 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).