

Product datasheet for **RC228345**

PEPD (NM_001166057) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEPD (NM_001166057) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PEPD
Synonyms:	PROLIDASE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC228345 representing NM_001166057
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGGCCACCGACCCTCGTTTTGGCTGGGAATGAAACCCTGAAGGTGCCGCTGGCCTCTTTG
CCTTGAACCGGCAGCGCCTGTGTGAGCGGCTGCGGAAGAACCCTGCTGTGCAAGCCGGCTCCATCGTGGT
CCTGCAGGGCGGGAGGAGACTCAGCGCTACTGCACCGACACCGGGTCTCTTCCGCCAGATTGCCAGC
GTCCTGACGTACAGAAGCCCTCTGTCTCCTCACTTTGCGTGGCGTCAACACGGACAGCGGCAGTGTCT
GCAGGGAGGCCTCTTTGACGGCATCAGCAAGTTCGAAGTCAACAATACCATTCTCACCCAGAGATCGT
TGAGTGCCGAGTGTAAAGACGGATATGGAGCTGGAGTTCTGCGCTATACCAATAAAATCTCCAGCGAG
GCCACCCTGAGGTAATGAAGGCTGTAAAAGTGGGAATGAAAGAATATGAGTTGAAAGCCTCTTCGAGC
ACTACTGCTACTCCGGGGCGGCATGCGCCACAGCTCCTACACCTGCATCTGCGGCAGTGGTGAAGTCT
AGCCGTGTACTACGACACGCGGAGCTCCCAACGACCGAACGATCCAGAATGGGGATATGTGCTGT
TTGACATGGGGCGTGAATTAAGGCTGTAAAAGTGGGAATGAAAGAATATGAGTTGAAAGCCTCTTCGAGC
TCACTGCAGACCAGAAGCCGTCTATGAGGCAGTGTGCGGAGCTCCCGTGCCGTCATGGGTGCCATGAA
GCCAGGTGTCTGGTGGCCTGACATGCACCGCCTGGCTGACCGCATCCACCTGGAGGAGCTGGCCACATG
GGCATCCTGAGCGGCAGCGTGGACGCCATGGTCCAGGCTCACCTGGGGCCGTGTTTATGCCTCACGGGC
TTGGCCACTTCTGGGCATTGACGTGCACGACGTGGGAGGCTACCCAGAGGGCGTGGAGCGCATCGACGA
GCCCGGCTGCGGAGCCTGCGCACTGCACGGCACCTGCAGCCAGGCATGGTGTCAACCGTGGAGCCGGGC
ATCTACTTCATCGACCACCTCCTGGATGAGGCCCTGGCGGACCCGGCCCGCCTCTTCTTAAACCGCG
AGGTCTGCAGCGCTTTGCGGTTTTGGCGGGTCCGCATCGAGGAGGACGTCGTGGTACTGACAGCGG
CATAGAGCTGCTGACCTGCGTGCCCGCACTGTGGAAGAGATTGAAGCATGCATGCCAGGCTGTGACAAG
GCCTTACCCCTTCTCTGGCCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228345 representing NM_001166057
Red=Cloning site Green=Tags(s)

MAAATGPSFWLGNELKVPLALFALNRQRLCERLRKNPAVQAGSIVVLQGGEEQRYCTDTGVLFRQIAS
VLTSQKPSVLLTLRGVNTDSGSVCREASFDGISKFEVNNILHPEIVECRVFKTDMELEVLRYTNKISSE
AHREVMKAVKVMKEYELESLEHYCYSRGMRHSSYTCICGSGENSAVLHYGHAGAPNDRTIQNGDMCL
FDMGGEYYCFASDITCSFPANGKFTADQKAVYEAVLRSSRAVMGAMKPGVWVWPMHRLADRIHLELAHM
GILSGSVDAMVQAHLGAVFMPHGLGHFLGIDVHDVGGYPEGVERIDEPLRSLRTARHLQPGMVL TVEPG
IYFIDHLLDEALADPARASFLNREVLQRFRRGGVRIEEDVVVTDSGIELLTCVPRVVEIEACMAGCDK
AFTPFSGPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8059_c11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001166057

ORF Size: 1287 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_001166057.2](#)

RefSeq ORF: 1290 bp

Locus ID: 5184

UniProt ID: [P12955](#)

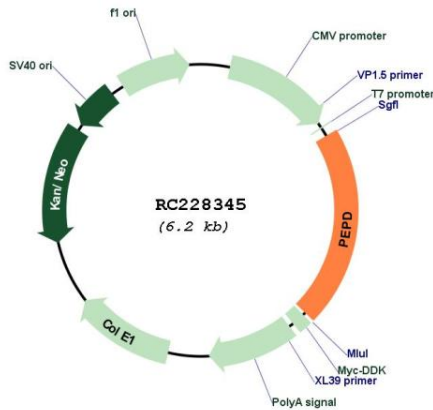
Cytogenetics: 19q13.11

Protein Families: Druggable Genome, Protease

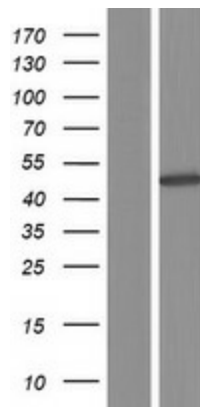
MW: 47.1 kDa

Gene Summary: This gene encodes a member of the peptidase family. The protein forms a homodimer that hydrolyzes dipeptides or tripeptides with C-terminal proline or hydroxyproline residues. The enzyme serves an important role in the recycling of proline, and may be rate limiting for the production of collagen. Mutations in this gene result in prolidase deficiency, which is characterized by the excretion of large amount of di- and tri-peptides containing proline. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RC228345



Western blot validation of overexpression lysate (Cat# [LY431373]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228345 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).