

## Product datasheet for **MR229849**

### Entpd5 (NM\_001286058) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Entpd5 (NM_001286058) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Entpd5
Synonyms:	A1196558; A1987697; Cd39l4; ER-UDPase; mNTPase; NTPDase-5; NTPDase5; Pcph
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR229849 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCCACTTCCTGGGGGCTGTCTTCATGCTGATCATAGCCTGCGTTGGCAGCACTGTCTTCTACAGAG  
 AACAGCAGACCTGGTTTGAAGGTGCTTCTTGTCTTCCATGTGCCCATTAATGTGAGTCCGCGCACCTT  
 TTATGGAATTATGTTTGTGCGGGCAGCACTGGAACCTCGATTTCATGTTTACACTTTTGTGCAGAAAACA  
 GCAGGACAGCTCCCTTTCTGGAAGGTGAAATTTTATTCTGTGAAGCCGGGACTTTCTGCTTTTGTGG  
 ATCAGCCCAAACAGGGTCTGAGACTGTCCAGGAGCTCTTGGAGGTGGCCAAAGACTCGATCCCCAGAAG  
 CCACTGGGAAAGGACCCCGTGGTTCTGAAAGCAACGGCCGACTCCGTTTGTCTGCCTGAGCAGAAAACC  
 CAGGCTCTGCTCTGGAGGTAGAGGAGATCTTCAAGAATTCACCTTTCTGGTCCAGATGGCAGCGTTA  
 GCATCATGGATGGTCTATGAAGGCATACTAGCCTGGGTACCCTGAACCTTTAACAGGTGAGTGTGCA  
 TGGTCGTGGCCAGGAGACTGTGGGGACCTTGACCTGGGGGTGCCTCCACCAAATCACGTTTCTACCC  
 CAGTTTGAAGAAACCCTGGAACAAACACCTAGGGGCTACCTCACTTCTTTGAGATGTTTAAACAGCACTT  
 TTAAGCTCTATACACATAGTTACTTGGGATTTGGACTGAAAGCTGCAAGACTGGCAACTCTGGGAGCCCT  
 GGAAGCAAAGGGACTGATGGACATACGTTTCAAGTGCCTGTTTACCAAGATGGTTGGAAGCAGAGTGG  
 ATCTTTGGGGGTGTGAAATACCAGTATGGTGGTAACCAAGAAGGGGAGATGGGCTTTGAACCCTGCTATG  
 CGGAAGTCTGAGGGTAGTACAGGGGAACTTACCAGCCAGAAGAAGTCCGAGGAAGCGCCTTCTACGC  
 TTTCTTACTACTACGATCGAGCCGCTGACACACACTTGATCGATTATGAAAAGGGCGGGTTTTAAAA  
 GTTGAAGATTTTGAAGAAAAGCCAGAGAAGTGTGTGACAACCTGGGGAGCTTCTCTCGGCAGTCTCT  
 TCCTCTGCATGGACCTCACTTACATCACAGCCCTGTTGAAAGATGGTTTTGGCTTTGCCGACGGCACCT  
 CTACAGCTCACAAAGAAAGTGAACAACATAGAGACTGGTTGGCCTTGGGGCCACCTTTCACCTGCTC  
 CAGTCTCTGGGCATCACCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR229849 protein sequence  
 Red=Cloning site Green=Tags(s)

MATSWGAVFMLIIACVGSTVFYREQQTFEFGVFLSSMCPINVSAGTFYGMFDAGSTGTRIHVYTFVQKT  
 AGQLPFLEGEIFDSVKPGLSAFVDQPKQGAETVQELLEVAKDSIPRSHWERTPVVLKATAGLRLLPEQKA  
 QALLLEVEEIEFKNSPFLVPDGSVSIMDGSYEGILAWVTVNFLTGQLHGRGQETVGLDLGGASTQITFLP  
 QFEKLTLEQTPRGYLTSEFMFNSTFKLYTHSYLGFGLKAARLATLGALEAKGTDGHTFRSACLPRWLEAEW  
 IFGGVKYQYGGNQEEMGFEPCEYAEVLRVVQGLHQPEEVRGSAFYAFSYYYDRAADTHLIDYEKGGVLK  
 VEDFERKAREVCDNLGSFSSGSPFLCMDLTYITALLKDGFGFADGTLQLTKKVNNIETGWALGATFHLL  
 QSLGITS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001286058

**ORF Size:** 1284 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\\_001286058.1](#), [NP\\_001272987.1](#)

**RefSeq Size:** 4889 bp

**RefSeq ORF:** 1284 bp

**Locus ID:** 12499

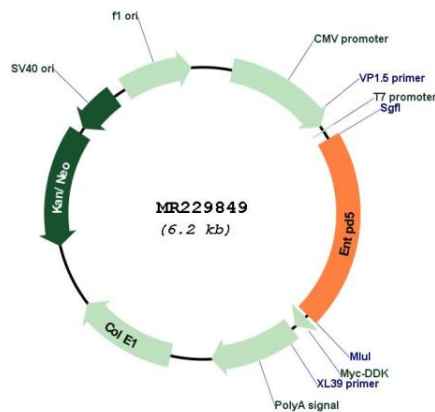
**UniProt ID:** [Q9WUZ9](#)

**Cytogenetics:** 12 39.18 cM

**MW:** 47.1 kDa

**Gene Summary:** Uridine diphosphatase (UDPase) that promotes protein N-glycosylation and ATP level regulation. UDP hydrolysis promotes protein N-glycosylation and folding in the endoplasmic reticulum, as well as elevated ATP consumption in the cytosol via an ATP hydrolysis cycle. Together with CMPK1 and AK1, constitutes an ATP hydrolysis cycle that converts ATP to AMP and results in a compensatory increase in aerobic glycolysis. The nucleotide hydrolyzing preference is GDP > IDP > UDP, but not any other nucleoside di-, mono- or triphosphates, nor thiamine pyrophosphate. Plays a key role in the AKT1-PTEN signaling pathway by promoting glycolysis in proliferating cells in response to phosphoinositide 3-kinase (PI3K) signaling. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR229849