

Product datasheet for **RG206415**

PDZD3 (NM_024791) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PDZD3
Synonyms:	IKEPP; NHERF4; PDZK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG206415 representing NM_024791
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGAAAGCCGAGATCTGCAGGACACAGCCTCGTTAACTCTGAAGTTTAAGTTTAACCCAAAGCTGG
 GCATTGATAATCCTGTCTCTCCCTGGCCGAAGACCACGACCCCTATGATCCCTGGAGCCTGGAGCGGCC
 TCGCTTCTGTTTACTGAGCAAGAGAGGGCAAGAGTTTTGGCTTCCACCTGCAGCAGGAGCTGGGCAGG
 GCTGGGCATGTGGTGTGACGGGTGGACCCAGGCACCTCTGCCAGCGCCAGGGTCTTCAGGAAGGAGACA
 GGATCCTGGCGGTGAACAATGATGTTGTGGAACACGAAGACTATGCGGTGGTGGTACGCCGATCCGGGC
 CAGCAGCCCTCGGGTGTGCTGACAGTATTGGCACGGCATGCACATGACGTGGCCCGAGCTCAGCTGGGA
 GAAGATGCCACCTCTGTCCCACCTAGGCCAGGGGTCCGGCCCCGGCTGTGCCACATAGTGAAAGATG
 AGGGTGGTTTTGGTTCAGTGTACCCATGGCAATCAGGGTCTTTCTGGTTGGTGCTAAGTACTGGAGG
 AGCAGCTGAGCGGGCAGGGGTCCCCCGGGGCCGGCTGCTGGAAGTGAATGGGCTTTGGCAGAGTGA
 CAGCAGGTGACCTTGTGTTGGCAGGGCCAGAGGTGGAAGAACAGTGTGCCAGCTGGGATTGCCCTCG
 CTGCACCCCTGGCAGAGGGCTGGGCACTGCCACCAAGCCCCGCTGCCTGCACCTGGAGAAAGGGCCCCA
 GGGTTTTGGTTCCTGCTCCGGGAGGAAAGGGCCTTGACGGTCGCCCTGGACAGTTCTGTGGGAGGTG
 GACCCGGGACTGCCAGCAAGAAGGCTGGGATGCAGGCTGGGACCGGCTGGTGGCTGTGGCTGGGGAGA
 GCGTGGAGGGGCTGGGCCATGAGGAGACAGTGTCCAGGATCCAGGGGCAGGGCTCCTGTGTCTCCCTCAC
 TGTCGTCGACCCTGAGGCGGACCGCTTCTCAGCATGGTTCGCTGTCCCACTCCTCTTCTGGAGAAC
 ACAGAGGCTCCCGCTCGCCCGAGGCAGAGCTCAGCCTCACTGGTTGAGACAGAGGACCTTCACTTG
 AAGACACAAGCGTGCCTTCTGTCCCTTTGGCTCCCGACAGTGCTTCTGTACCCTGGGCTGGTGGCAG
 CTATGGCTTCCGACTCAGTTGTGTGGCCAGTGGGCCTCGTCTCTTCACTCTCCAGGTGACTCCAGGAGGC
 TCAGCTGCCCGGGCTGGGCTGCAAGTGGGAGACGTGATTCTGGAAGTGAACGGGTATCCTGTTGGGGAC
 AGAATGACCTGGAGAGGCTTCAGCAGCTGCCTGAGGCTGAGCCACCCCTCTGCCTGAAGCTGGCAGCCAG
 GTCTCTCGGGGCTTGAAGCCTGGATTCCCCCTGGGGCTGCAGAGGACTGGGCTCTGGCCTCGGATCTA
 CTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206415 representing NM_024791
 Red=Cloning site Green=Tags(s)

MEKAADLQDTASLTLKFKFNPKLGIDNPVLSLAEDHDPYDPWSLERPRFCLLSKEEGKSFGFHLQQELGR
 AGHVVCVRVDPGTSARQQLQEGDRILAVNNDVVEHEDYAVVVRIRASSPRVLLTVLARHAHDVARAQLG
 EDAHLCPITLPGVPRPLCHIVKDEGGFGFSVTHGNQGPFWLVLTGGAAERAGVPPGARLLEVNGLWQSG
 QQVTLVLVAGPEVEEQCRQLGLPLAAPLAEGWALPTKPRCLHLEKGPQGFGLLREEKGLDGRPGQFLWEV
 DPGLPAKKAGMQAGDRLVAVAGESVEGLGHEETVSRIQGGSCVSLTVVDPEADRFSSMVRLSPLLFLEN
 TEAPASPQSSSASLVETEDPSLEDTSVPSVPLGSRQCFLYPGPGGSYGFRLSCVASGPRLFISQVTPGG
 SAARAGLQVGDVILEVNGYPVGGQNDLERLQQLPEAEPPCLCLKLAARSLRGLEAWIPPGAEDWALASDL
 L

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024791

ORF Size: 1473 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024791.2](#), [NP_079067.2](#)

RefSeq Size: 2246 bp

RefSeq ORF: 1476 bp

Locus ID: 79849

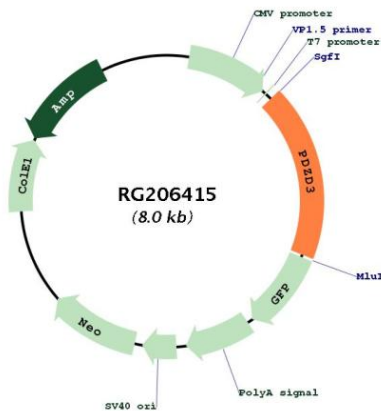
UniProt ID: [Q86UT5](#)

Cytogenetics: 11q23.3

Protein Families: Druggable Genome

Gene Summary: Guanylyl cyclase C (GCC, or GUCY2C; MIM 601330) produces cGMP following the binding of either endogenous ligands or heat-stable enterotoxins secreted by *E. coli* and other enteric bacteria. Activation of GCC initiates a signaling cascade that leads to phosphorylation of the cystic fibrosis transmembrane conductance regulator (CFTR; MIM 602421), followed by a net efflux of ions and water into the intestinal lumen. IKEPP is a regulatory protein that associates with GCC and regulates the amount of cGMP produced following receptor stimulation (Scott et al., 2002 [PubMed 11950846]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG206415