

Product datasheet for **RR214516**

Zdhhc3 (NM_001039014) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Zdhhc3 (NM_001039014) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Zdhhc3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR214516 representing NM_001039014
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGCTTATCCCCACTCATCACTCCGAGACATTGAACGGAACCAGAATACCTCCAGCCAGAGAAGT
GTGCCCCACCTCCCTCCCTGGCCCGTGGGAACCATGTGGTTTATCCGCGATGGCTGTGGCATCGCCTG
TGCCATTGTACCTGGTTTCTGGTCTCTATGCAGAGTTGTAGTCTCTTTGTCATGCTGATTCCATCC
CGAGACTACGCATACAGTATCATCAACGGAATTGTGTTCAACCTGCTGGCCTTCTTGCTCTGGCCTCCC
ACTGCCGGCCATGCTGACGGACCCCGGGCAGTGCCCAAAGGAAATGCCACTAAAGAGTTCATCGAGAG
CCTTCAGCTGAAGCCTGGGCAGGTGGTGTACAAGTGTCCCAAGTGTGCAGCATCAAGCCGACCGGGCA
CACCAGTGCAGTGTGTAAGCGGTGCATTGCAAGATGGACCACCACTGTCTTGGGTCAACAAGTGTG
TCGGCGAGAACAACCAGAAGTACTTTGCTCCTGTTCAATGTACATAGCTCTCATTTCCTGCACGCCCT
CATCATGGTGGGATTCACCTTCTGCATTGCTTTGAAGAAGACTGGACAAAGTGCAGCTCCTTCTCACCG
CCCACCACTGTTATCCTGCTCATCCTGCTGTTTTGAGGCCCTGCTCTCCTCATTTCACATCAGTGA
TGTTTGGGACCAAGTGCCTCATCTGCACAGATGAGACGGGAATAGAACAATTGAAAAAGGAAGAGAG
AAGATGGGCTAAAAAACAAAGTGGATGAACATGAAAGCCGTTTTTGGCCACCCTTCTCTTTAGGCTGG
GCCAGCCCTTTGCCACACCAGACCAAGGGAAGGCAGACCCGTACCAGTATGTGGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR214516 representing NM_001039014
 Red=Cloning site Green=Tags(s)

MMLIPTHHFRDIERKPEYLQPEKAPPPFPGVGTMMWIFRDGCGIACAIVTWFLVLYAEFVVLVFMILIPS
 RDYAYSIINGIVFNLLAFLALASHCRAMLTPDPAVPGKGNATKEFIESLQLKPGQVYKCPKCCSIPKPDRA
 HHC5VCKRCIRKMDHHCWPVNNVCVENNQKYFVLFVMTYIALISLHALIMVGFHFLHCFEEDWTKCSSFSP
 PTTVILLILLCFEALLFLIFTSVMFGTQVHSICTDETGIEQLKKEERRWAKKTKWMMKAVFGHPFSLGW
 ASPFATPDQ GKADPYQYVV

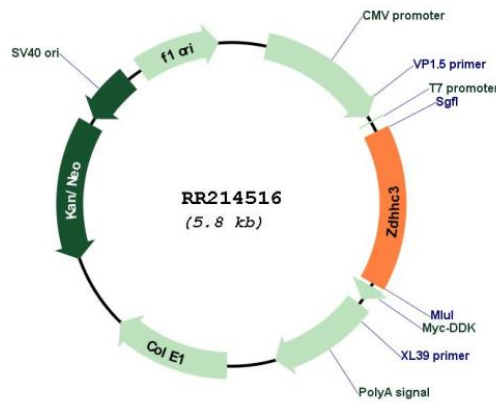
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001039014

ORF Size:	897 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:	<ol style="list-style-type: none">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_001039014.1 , NP_001034103.1
RefSeq Size:	1880 bp
RefSeq ORF:	900 bp
Locus ID:	301081
UniProt ID:	Q2TGK3
Cytogenetics:	8q32
MW:	34.1 kDa

Gene Summary:

Golgi-localized palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates. Has no stringent fatty acid selectivity and in addition to palmitate can also transfer onto target proteins myristate from tetradecanoyl-CoA and stearate from octadecanoyl-CoA (By similarity). Plays an important role in G protein-coupled receptor signaling pathways involving GNAQ and potentially other heterotrimeric G proteins by regulating their dynamic association with the plasma membrane (By similarity). Palmitoylates ITGA6 and ITGB4, thereby regulating the alpha-6/beta-4 integrin localization, expression and function in cell adhesion to laminin (By similarity). Plays a role in the TRAIL-activated apoptotic signaling pathway most probably through the palmitoylation and localization to the plasma membrane of TNFRSF10A (By similarity). In the brain, by palmitoylating the gamma subunit GABRG2 of GABA(A) receptors and regulating their postsynaptic accumulation, plays a role in synaptic GABAergic inhibitory function and GABAergic innervation. Palmitoylates the neuronal protein GAP43 which is also involved in the formation of GABAergic synapses. Palmitoylates NCDN thereby regulating its association with endosome membranes. Probably palmitoylates PRCD and is involved in its proper localization within the photoreceptor. Could mediate the palmitoylation of NCAM1 and regulate neurite outgrowth. Could palmitoylate DNAJC5 and regulate its localization to Golgi membranes (By similarity). Also constitutively palmitoylates DLG4 (PubMed:19596852). May also palmitoylate SNAP25. Could palmitoylate the glutamate receptors GRIA1 and GRIA2 but this has not been confirmed in vivo (By similarity). Could also palmitoylate the D(2) dopamine receptor DRD2.[UniProtKB/Swiss-Prot Function]