

## Product datasheet for **RN210878**

### **Zdhhc2 (NM\_145096) Rat Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Zdhhc2 (NM_145096) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Zdhhc2
Synonyms:	DHHC2; srec
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN210878 representing NM_145096 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCCCTCGGGCCCCGGTGGCGTGAGGCGGCGGTGCCGGCGGGTGCTCTACTGGATCCCTGTGGTGT  
TCATCAGCTTGCTTCTGGGCTGGTGCTACTATGCTTACGCGATCCAGCTGTGCATAGTGCCATGAAAA  
CATTGGTGAACAAGTTGTGTGCCTCATGGCTTATCATCTACTTTTCGCAATGTTTGTCTGGTCATACTGG  
AAAACCATTTTTACATTGCCCATGAATCCTTCAAAAGAATTCCATCTCTTATGCAGAGAAAGAATTGC  
TGGAGAGAGAGCCAAGAGGAGAAGCCCATCAGGAAGTTCTGAGGCGAGCAGCCAAAGACCTTCCCATCTA  
CACCAGGACCATGTCCGGCGCGATCCGATATTGTGACAGATGCCGACTTATAAAGCCAGACCGCTGCCAT  
CACTGTTCCGTCTGTGATAAATGTATTTGAAGATGGACCATCATTGCCCATGGGTGAACAATTGTGTTG  
GATTTTCAAATTATAAATCTTCCTCCTTTTCTTGGCTTACTCTCTGCTGTACTGCCTTTTCATTGCTGC  
TACAGATTTACAGTATTTTATCAGATTTTGGACAAATGGTCTCCCTGATACTCAAGCCAAGTTCCATATT  
ATGTTTTATTCTTTGCTGCAGCTATGTTTCTGTCAGCTTGCTCTCTTTTGGTTATCATTGCTGGC  
TAGTCAGCAAAAATAAATCTACATTAGAGGCATTACAGAAATCCAGTATTTAGACATGGAACAGATAAGAA  
CGGATTCAGCTTGGGTTTCAGTAAAAACATGCGACAAGTTTTTGGCGATGAGAAGAAGTATTGGCTGTTA  
CCAATATTTTCAAGTCAAGGTGATGGCTGTTCCCTTCCAACCTTGCTTGTAAACCAGGATCCTGAACAAC  
CTTCCACTCCTGCAGGACTAAATTCAACAGCGAAAAATCCTGAAAACCATCAGTTTCTGCAAAAGCCGTT  
GAGAGAGTCACAGAGCCACCTCCTTACGGATTCTCAGACCTGGACAGAGAACAGTTCAAACCTCCGGGAGA  
TGCAAAGCCGGTATGAGCAACCTGCATTAACATATGGAGAACGAGACT**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



[View online »](#)

<b>ACCN:</b>	NM_145096
<b>Insert Size:</b>	1101 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_145096.2</a></u> , <u><a href="#">NP_659564.2</a></u>
<b>RefSeq Size:</b>	1735 bp
<b>RefSeq ORF:</b>	1101 bp
<b>Locus ID:</b>	246326
<b>Cytogenetics:</b>	16q12.1
<b>Gene Summary:</b>	<p>Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and is involved in a variety of cellular processes (PubMed:19596852, PubMed:21343290, PubMed:25589740). 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). In the nervous system, plays a role in long term synaptic potentiation by palmitoylating AKAP5 through which it regulates protein trafficking from the dendritic recycling endosomes to the plasma membrane and controls both structural and functional plasticity at excitatory synapses (PubMed:25589740). In dendrites, mediates the palmitoylation of DLG4 when synaptic activity decreases and induces synaptic clustering of DLG4 and associated AMPA-type glutamate receptors (PubMed:19596852). Also mediates the de novo and turnover palmitoylation of RGS7BP, a shuttle for Gi/o-specific GTPase-activating proteins/GAPs, promoting its localization to the plasma membrane in response to the activation of G protein-coupled receptors. Through the localization of these GTPase-activating proteins/GAPs, it also probably plays a role in G protein-coupled receptors signaling in neurons (PubMed:21343290). Also probably plays a role in cell adhesion by palmitoylating CD9 and CD151 to regulate their expression and function. Palmitoylates the endoplasmic reticulum protein CKAP4 and regulates its localization to the plasma membrane. Could also palmitoylate LCK and regulate its localization to the plasma membrane (By similarity). [UniProtKB/Swiss-Prot Function]</p>