

Product datasheet for SC334047

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

D4S234E (NSG1) (NM_001287764) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: D4S234E (NSG1) (NM_001287764) Human Untagged Clone

Tag: Tag Free Symbol: D4S234E

Synonyms: D4S234; D4S234E; NEEP21; P21

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC334047 representing NM_001287764.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGCCCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM 001287764

Insert Size: 477 bp

OTI Disclaimer: 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).

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: <u>NM 001287764.1</u>

RefSeq Size: 2541 bp
RefSeq ORF: 477 bp
Locus ID: 27065
Cytogenetics: 4p16.3

Protein Families: Druggable Genome, Transmembrane

MW: 18 kDa

Gene Summary: Plays a role in the recycling mechanism in neurons of multiple receptors, including AMPAR,

APP and L1CAM and acts at the level of early endosomes to promote sorting of receptors toward a recycling pathway. Regulates sorting and recycling of GRIA2 through interaction with GRIP1 and then contributes to the regulation of synaptic transmission and plasticity by affecting the recycling and targeting of AMPA receptors to the synapse (By similarity). Is required for faithful sorting of L1CAM to axons by facilitating trafficking from somatodendritic early endosome or the recycling endosome (By similarity). In an other hand, induces

apoptosis via the activation of CASP3 in response to DNA damage (PubMed:20599942, PubMed:20878061).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) lacks an alternate exon in the 5' UTR and uses an alternate splice junction at the 5' end of an exon compared to variant 3. The resulting isoform (b) is shorter at the N-terminus compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record

were based on transcript alignments.