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Product datasheet for RG206927

D4S234E (NSG1) (NM_001040101) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	D4S234E
Synonyms:	D4S234; D4S234E; NEEP21; P21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG206927 representing NM_001040101
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGAAGTTGGGGAACAATTTCGCAGAGAAGGGCACCAAGCAGCCGCTGCTGGAGGATGGCTTCGACA
CCATTCCCCTGATGACGCCCCTCGATGTCAATCAGCTGCAGTTCCCGCCCCCGGATAAGGTGGTCGTGAA
AACTAAGACCGAGTATGAACCTGACCGCAAGAAAGGGAAAGCACGTCCTCCCCAAATTGCTGAGTTCACC
GTCAGCATCACGGAGGGTGTCACCGAGAGGTTTAAGGTCTCCGTGTTGGTCCTCTTCGCCCTGGCCTTCC
TCACCTGCGTCGTCTTCCTGGTTGTCTACAAGGTGTACAAGTATGACCGCGCCTGCCCCGATGGGTTCGT
CCTCAAGAACACCCAGTGCATCCCAGAAGGCTTGGAGAGCTACTACGCGGAGCAAGACTCCAGTGCCCGG
GAGAAATTTTACACAGTCATAAACCACTACAACCTGGCCAAGCAGAGCATCACGCGCTCCGTATCGCCCT
GGATGTCAGTTCTGTCAGAAGAGAAGCTGTCCGAGCAGGAGACTGAAGCGGCTGAGAAGTCAGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG206927 representing NM_001040101
Red=Cloning site Green=Tags(s)

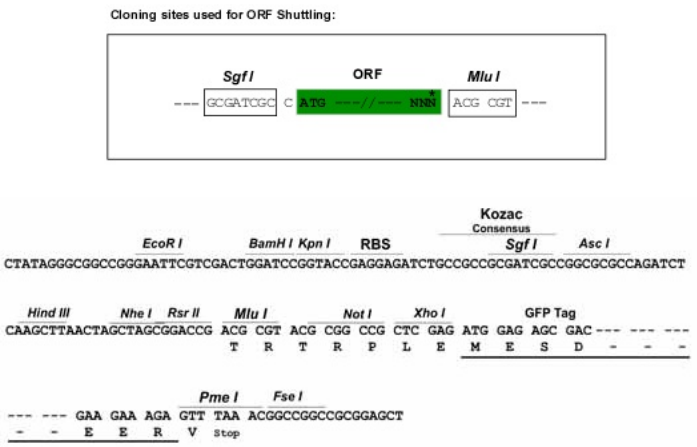
MVKLGNNFAEKGTKQPLLEDGFDTIPLMTPLDVNQLQFPPPDKVVVKTKTEYEPDRKKGKARPPQIAEFT
VSITEGVTERFKVSVLVLFALAFLTCVVFLVVYKVYKYDRACPDGFVLKNTQCIPEGLESYYAEQDSSAR
EKFYTVINHYNLAKQSITRSVSPWMSVLSEEKLSEQETEAAEKSA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_001040101

ORF Size: 555 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_001040101.2

RefSeq Size: 2635 bp

RefSeq ORF: 558 bp

Locus ID: 27065

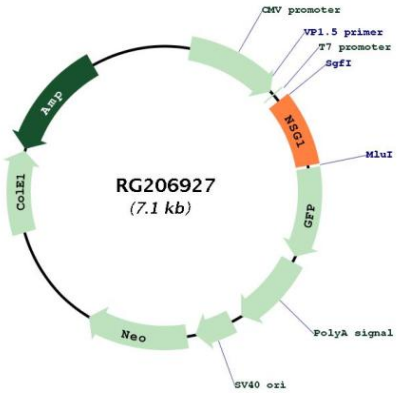
UniProt ID: P42857

Cytogenetics: 4p16.3

Protein Families: Druggable Genome, Transmembrane

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]

Product images:



Circular map for RG206927