

Product datasheet for RG235332

SHANK3 (NM 033517) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SHANK3 (NM_033517) Human Tagged ORF Clone

Tag: TurboGFP Symbol: SHANK3

Synonyms: DEL22q13.3; PROSAP2; PSAP2; SCZD15; SPANK-2

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

Restriction Sites: Sgfl-Nhel

Cloning Scheme:

ACCN: NM_033517 **ORF Size:** 5193 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional

amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA.

Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence

verification at a reduced cost. Please contact our customer care team at

<u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.

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).



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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: <u>NM 033517.1</u>, <u>NP 277052.1</u>

RefSeq Size: 7113 bp
RefSeq ORF: 5196 bp
Locus ID: 85358
Cytogenetics: 22q13.33

Gene Summary: This gene is a member of the Shank gene family. Shank proteins are multidomain scaffold

proteins of the postsynaptic density that connect neurotransmitter receptors, ion channels, and other membrane proteins to the actin cytoskeleton and G-protein-coupled signaling pathways. Shank proteins also play a role in synapse formation and dendritic spine

maturation. Mutations in this gene are a cause of autism spectrum disorder (ASD), which is characterized by impairments in social interaction and communication, and restricted behavioral patterns and interests. Mutations in this gene also cause schizophrenia type 15,

and are a major causative factor in the neurological symptoms of 22q13.3 deletion syndrome, which is also known as Phelan-McDermid syndrome. Additional isoforms have been described for this gene but they have not yet been experimentally verified. [provided by

RefSeq, Mar 2012]