

Product datasheet for **KN235332RB**

SHANK3 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

Symbol: SHANK3

Locus ID: 85358

Components: **KN235332G1**, SHANK3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)
KN235332G2, SHANK3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)
KN235332RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.
GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_001080420](#), [NM_033517](#)

Synonyms: DEL22q13.3; KIAA1650; PROSAP2; PSAP2; SPANK-2

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]



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Product images:

