

## **Product datasheet for TR312612**

## OriGene Technologies, Inc.

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## KA1 (GRIK4) Human shRNA Plasmid Kit (Locus ID 2900)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** KA1 (GRIK4) Human shRNA Plasmid Kit (Locus ID 2900)

**Locus ID:** 2900

Synonyms: EAA1; GluK4; GluK4-2; GRIK; KA1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: GRIK4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2900). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001282470, NM 001282473, NM 014619, NM 014619.1, NM 014619.2, NM 014619.3,

NM 014619.4, NM 001282473.1, NM 001282473.2, NM 001282470.1, NM 001282470.2,

BC146652, BC150173, NM 014619.5

UniProt ID: Q16099

**Summary:** This gene encodes a protein that belongs to the glutamate-gated ionic channel family.

Glutamate functions as the major excitatory neurotransmitter in the central nervous system through activation of ligand-gated ion channels and G protein-coupled membrane receptors. The protein encoded by this gene forms functional heteromeric kainate-preferring ionic channels with the subunits encoded by related gene family members. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Sep 2013]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).