

Product datasheet for TL312869

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

GABA A Receptor alpha 1 (GABRA1) Human shRNA Plasmid Kit (Locus ID 2554)

Product data:

Product Type: shRNA Plasmids

Product Name: GABA A Receptor alpha 1 (GABRA1) Human shRNA Plasmid Kit (Locus ID 2554)

Locus ID: 2554

Synonyms: DEE19; ECA4; EIEE19; EJM; EJM5

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: GABRA1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2554).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 000806, NM 001127643, NM 001127644, NM 001127645, NM 001127646,

NM 001127647, NM 001127648, NM 000806.1, NM 000806.2, NM 000806.3, NM 000806.4, NM 000806.5, NM 001127646.1, NM 001127647.1, NM 001127648.1, NM 001127643.1, NM 001127644.1, NM 001127645.1, BC030696, BC030696.1, BM927274, NM 001127643.2,

NM 001127645.2, NM 001127644.2, NM 001127648.2

UniProt ID: P14867

Summary: This gene encodes a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory

neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene cause juvenile myoclonic epilepsy and childhood absence epilepsy type 4. Multiple transcript variants encoding the same protein have been identified

for this gene. [provided by RefSeq, Jul 2008]

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).