

Product datasheet for **TR313913**

CHRNA4 Human shRNA Plasmid Kit (Locus ID 1143)

Product data:

| | |
|---------------------------|--|
| Product Type: | shRNA Plasmids |
| Product Name: | CHRNA4 Human shRNA Plasmid Kit (Locus ID 1143) |
| Locus ID: | 1143 |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | CHRNA4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1143). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | NM_000750 , NM_001256567 , NM_000750.1 , NM_000750.2 , NM_000750.3 , NM_001256567.1 , BC096080 , BC096081 , BC096082 , BC096083 , NM_001256567.3 , NM_000750.5 |
| UniProt ID: | P30926 |
| Summary: | This gene is found within a conserved gene cluster and encodes one of the beta subunits of the nicotinic acetylcholine receptor (nAChRs) superfamily which form ligand-gated ion channels with a central pore that forms a cation channel. Neuronal nAChRs are pentameric structures that can be either homomeric or heteromeric, with heteromeric structures containing both alpha and beta subunits. Each subunit contains an extracellular amino terminus and four transmembrane domains. Nicotine is one of the agonists that binds to the receptor. Variants in this gene have been associated with nicotine dependence and lung cancer. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2017] |
| 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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service . |



[View online »](#)

**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).