

Product datasheet for **TR313914**

CHRNA3 Human shRNA Plasmid Kit (Locus ID 1142)

Product data:

Product Type:	shRNA Plasmids
Product Name:	CHRNA3 Human shRNA Plasmid Kit (Locus ID 1142)
Locus ID:	1142
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CHRNA3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1142). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_000749 , NM_001347717 , NM_000749.1 , NM_000749.2 , NM_000749.3 , BC069681 , BC069681.1 , BC069703 , BC069788 , NM_000749.5
UniProt ID:	Q05901
Summary:	The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are (hetero)pentamers composed of homologous subunits. The subunits that make up the muscle and neuronal forms of nAChRs are encoded by separate genes and have different primary structure. There are several subtypes of neuronal nAChRs that vary based on which homologous subunits are arranged around the central channel. They are classified as alpha-subunits if, like muscle alpha-1 (MIM 100690), they have a pair of adjacent cysteines as part of the presumed acetylcholine binding site. Subunits lacking these cysteine residues are classified as beta-subunits (Groot Kormelink and Luyten, 1997 [PubMed 9009220]). Elliott et al. (1996) [PubMed 8906617] stated that the proposed structure for each subunit is a conserved N-terminal extracellular domain followed by 3 conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region.[supplied by OMIM, Apr 2010]
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 .



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**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).