

## **Product datasheet for TL305394**

## OriGene Technologies, Inc.

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## **CHRFAM7A Human shRNA Plasmid Kit (Locus ID 89832)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** CHRFAM7A Human shRNA Plasmid Kit (Locus ID 89832)

**Locus ID:** 89832

Synonyms: CHRNA7; CHRNA7-DR1; D-10; NACHRA7

**Vector:** pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: CHRFAM7A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

89832). 5µg purified plasmid DNA per construct

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

RefSeq: NM 139320, NM 148911, NM 148911.1, NM 139320.1, BC101348, BC101345, BC101346,

BC101347

UniProt ID: P36544

**Summary:** The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated

ion channels that mediate fast signal transmission at synapses. The family member CHRNA7, which is located on chromosome 15 in a region associated with several neuropsychiatric disorders, is partially duplicated and forms a hybrid with a novel gene from the family with sequence similarity 7 (FAM7A). Alternative splicing has been observed, and two variants exist, for this hybrid gene. The N-terminally truncated products predicted by the largest open reading frames for each variant would lack the majority of the neurotransmitter-gated ion-channel ligand binding domain but retain the transmembrane region that forms the ion channel. Although current evidence supports transcription of this hybrid gene, translation of the nicotinic acetylcholine receptor-like protein-encoding open reading frames has not been

confirmed. [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).