

## **Product datasheet for TL309797**

## OriGene Technologies, Inc.

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## Ribonuclease H2, subunit A (RNASEH2A) Human shRNA Plasmid Kit (Locus ID 10535)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Ribonuclease H2, subunit A (RNASEH2A) Human shRNA Plasmid Kit (Locus ID 10535)

**Locus ID:** 10535

Synonyms: AGS4; JUNB; RNASEHI; RNHIA; RNHL; THSD8

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: RNASEH2A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

10535). 5µg purified plasmid DNA per construct

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

RefSeq: NM 006397, NM 006397.1, NM 006397.2, BC011748, BM664190, NM 006397.3

UniProt ID: 075792

**Summary:** The protein encoded by this gene is a component of the heterotrimeric type II ribonuclease H

enzyme (RNAseH2). RNAseH2 is the major source of ribonuclease H activity in mammalian cells and endonucleolytically cleaves ribonucleotides. It is predicted to remove Okazaki

fragment RNA primers during lagging strand DNA synthesis and to excise single

ribonucleotides from DNA-DNA duplexes. Mutations in this gene cause Aicardi-Goutieres

Syndrome (AGS), a an autosomal recessive neurological disorder characterized by

progressive microcephaly and psychomotor retardation, intracranial calcifications, elevated levels of interferon-alpha and white blood cells in the cerebrospinal fluid.[provided by

RefSeq, Aug 2009]

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).