

Product datasheet for TR314887

OriGene Technologies, Inc.

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Angiotensin II Type 2 Receptor (AGTR2) Human shRNA Plasmid Kit (Locus ID 186)

Product data:

Product Type: shRNA Plasmids

Product Name: Angiotensin II Type 2 Receptor (AGTR2) Human shRNA Plasmid Kit (Locus ID 186)

Locus ID: 186

Synonyms: AT2; ATGR2; MRX88

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: AGTR2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

186). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 000686, NM 000686.1, NM 000686.2, NM 000686.3, NM 000686.4, BC095504,

NM 000686.5

UniProt ID: P50052

Summary: The protein encoded by this gene belongs to the G-protein coupled receptor 1 family, and

functions as a receptor for angiotensin II. It is an intergral membrane protein that is highly expressed in fetus and in neonates, but scantily in adult tissues, except brain, adrenal

medulla, and atretic ovary. This receptor has been shown to mediate programmed cell death

and this apoptotic function may play an important role in developmental biology and

pathophysiology. Mutations in this gene are been associated with X-linked cognitive disability. Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and SARS-CoV-2 infection results in down-regulation of angiotensin converting enzyme-2 (ACE2) receptors, the effects of which,

triggers serious inflammatory lesions in the tissues involved, primarily in the lungs. The inflammatory reaction appears to be mediated by angiotensin II derivatives, including the angiotensin AT2 receptor which has been found to be upregulated in bronchoalveolar lavage samples from Coronavirus disease 2019 (COVID19) patients. [provided by RefSeq, Jul 2020]

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).