

# Product datasheet for TR306897

## ABO Human shRNA Plasmid Kit (Locus ID 28)

## **Product data:**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	shRNA Plasmids
Product Name:	ABO Human shRNA Plasmid Kit (Locus ID 28)
Locus ID:	28
Synonyms:	A3GALNT; A3GALT1; GTB; NAGAT
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ABO - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 28). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 020469, NM 020469.1, NM 020469.2, BC069595, BC069595.1, BC069605, BC069814, BC111575, NM 020469.3</u>
UniProt ID:	<u>P16442</u>
Summary:	This gene encodes proteins related to the first discovered blood group system, ABO. Variation in the ABO gene (chromosome 9q34.2) is the basis of the ABO blood group, thus the presence of an allele determines the blood group in an individual. The 'O' blood group is caused by a deletion of guanine-258 near the N-terminus of the protein which results in a frameshift and translation of an almost entirely different protein. Individuals with the A, B, and AB alleles express glycosyltransferase activities that convert the H antigen into the A or B antigen. Other minor alleles have been found for this gene. This locus has been identified as a susceptibility locus for severe coronavirus disease 2019 (COVID-19) by genome-wide association study. [provided by RefSeq, Aug 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> .



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### **GRIGENE** ABO Human shRNA Plasmid Kit (Locus ID 28) – TR306897

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).

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