

# Product datasheet for TG502295

## Tlr4 Mouse shRNA Plasmid (Locus ID 21898)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Tlr4 Mouse shRNA Plasmid (Locus ID 21898)
Locus ID:	21898
Synonyms:	Lps; Ly87; Ran/M1; Ras; Rasl2-8
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Tlr4 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 21898). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<u>BC029856, NM 021297, NM 021297.1, NM 021297.2, NM 021297.3</u>
UniProt ID:	<u>Q9QUK6</u>
Summary:	This gene belongs to the evolutionarily-conserved Toll-like receptor family, whose members are type-1 transmembrane proteins that are involved in innate immunity. Toll-like receptors are characterized by an extracellular leucine-rich repeat domain that functions in ligand recognition and an intracellular toll/interleukin-1 receptor-like domain that is crucial for signal transduction. The receptor encoded by this gene mediates the innate immune response to bacterial lipopolysaccharide, a major component of the outer membrane of Gram-negative bacteria, through synthesis of pro-inflammatory cytokines and chemokines. In addition, this protein can recognize other pathogens from Gram-negative and Gram-positive bacteria as well as viral components. Mice deficient in this gene display a number of immune response-related phenotypes including hyporesponsiveness to bacterial lipopolysaccharide and increased levels of respiratory syncytial virus compared to controls. [provided by RefSeq, Sep 2015]
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** TIr4 Mouse shRNA Plasmid (Locus ID 21898) – TG502295

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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