

## Product datasheet for **TR505757**

### Ticam1 Mouse shRNA Plasmid (Locus ID 106759)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Ticam1 Mouse shRNA Plasmid (Locus ID 106759)
Locus ID:	106759
Synonyms:	AW046014; AW547018; TICAM-1; TRIF
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ticam1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 106759). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC094338</a> , <a href="#">NM_174989</a> , <a href="#">NM_174989.1</a> , <a href="#">NM_174989.2</a> , <a href="#">NM_174989.3</a> , <a href="#">NM_174989.4</a> , <a href="#">BC033406</a> , <a href="#">BC037048</a> , <a href="#">BC062191</a> , <a href="#">NM_174989.5</a>
UniProt ID:	<a href="#">Q80UF7</a>
Summary:	Involved in innate immunity against invading pathogens. Adapter used by TLR3, TLR4 (through TICAM2) and TLR5 to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis (PubMed:12855817, PubMed:16002681, PubMed:21703541). Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:12855817, PubMed:16002681, PubMed:21703541). Distinct protein-interaction motifs allow recruitment of the effector proteins TBK1, TRAF6 and RIPK1, which in turn, lead to the activation of transcription factors IRF3 and IRF7, NF-kappa-B and FADD respectively (PubMed:12855817, PubMed:16002681, PubMed:21703541). Phosphorylation by TBK1 on the pLxIS motif leads to recruitment and subsequent activation of the transcription factor IRF3 to induce expression of type I interferon and exert a potent immunity against invading pathogens (By similarity). Component of a multi-helicase-TICAM1 complex that acts as a cytoplasmic sensor of viral double-stranded RNA (dsRNA) and plays a role in the activation of a cascade of antiviral responses including the induction of proinflammatory cytokines (PubMed:21703541).[UniProtKB/Swiss-Prot Function]



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**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 [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**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](mailto: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).