

Product datasheet for **TR510244**

Arg2 Mouse shRNA Plasmid (Locus ID 11847)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Arg2 Mouse shRNA Plasmid (Locus ID 11847) |
| Locus ID: | 11847 |
| Synonyms: | All; AU022422 |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | Arg2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 11847). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | BC023349 , NM_009705 , NM_009705.1 , NM_009705.2 , NM_009705.3 |
| UniProt ID: | O08691 |
| Summary: | May play a role in the regulation of extra-urea cycle arginine metabolism and also in down-regulation of nitric oxide synthesis. Extrahepatic arginase functions to regulate L-arginine bioavailability to nitric oxid synthase (NOS). Arginine metabolism is a critical regulator of innate and adaptive immune responses. Seems to be involved in negative regulation of the survival capacity of activated CD4(+) and CD8(+) T cells (PubMed:27745970, PubMed:25009204). May suppress inflammation-related signaling in asthmatic airway epithelium (PubMed:27214549). May contribute to the immune evasion of H.pylori by restricting M1 macrophage activation and polyamine metabolism (PubMed:27074721). May play a role in promoting prenatal immune suppression (By similarity). Regulates RPS6KB1 signaling, which promotes endothelial cell senescence and inflammation and implicates NOS3/eNOS dysfunction (PubMed:22928666). Can inhibit endothelial autophagy independently of its enzymatic activity implicating mTORC2 signaling (PubMed:25484082). Involved in vascular smooth muscle cell senescence and apoptosis independently of its enzymatic activity (By similarity).[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. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).