

Product datasheet for **TR516714**

Rnf41 Mouse shRNA Plasmid (Locus ID 67588)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Rnf41 Mouse shRNA Plasmid (Locus ID 67588) |
| Locus ID: | 67588 |
| Synonyms: | 2210404G21Rik; 4930511A05Rik; 4933415P08Rik; D10Ertd722e; FLRF; Nrdp1 |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | Rnf41 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 67588). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | BC019415 , BC049078 , NM_001164237 , NM_026259 , NR_104288 , NR_104289 , NR_104290 , NM_026259.1 , NM_026259.2 , NM_026259.3 , NM_001164237.1 |
| UniProt ID: | Q8BH75 |
| Summary: | Acts as E3 ubiquitin-protein ligase and regulates the degradation of target proteins. Polyubiquitinates MYD88 (By similarity). Negatively regulates MYD88-dependent production of proinflammatory cytokines. Can promote TRIF-dependent production of type I interferon and inhibits infection with vesicular stomatitis virus. Promotes also activation of TBK1 and IRF3 (PubMed:19483718). Involved in the ubiquitination of erythropoietin (EPO) and interleukin-3 (IL-3) receptors. Thus, through maintaining basal levels of cytokine receptors, RNF41 is involved in the control of hematopoietic progenitor cell differentiation into myeloerythroid lineages (PubMed:18495327). Contributes to the maintenance of steady-state ERBB3 levels by mediating its growth factor-independent degradation. Involved in the degradation of the inhibitor of apoptosis BIRC6 and thus is an important regulator of cell death by promoting apoptosis. Acts also as a PRKN modifier that accelerates its degradation, resulting in a reduction of PRKN activity, influencing the balance of intracellular redox state. The RNF41-PRKN pathway regulates autophagosome-lysosome fusion during late mitophagy. Mitophagy is a selective form of autophagy necessary for mitochondrial quality control (PubMed:24949970).[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).