

Product datasheet for **TR513876**

Nlrc4 Mouse shRNA Plasmid (Locus ID 268973)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Nlrc4 Mouse shRNA Plasmid (Locus ID 268973)
Locus ID:	268973
Synonyms:	9530011P19Rik; Card12; CLAN; CLAN1; CLANA; CLANB; CLANC; CLAND; IPAF
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Nlrc4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 268973). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001033367 , NM_001033367.1 , NM_001033367.2 , NM_001033367.3 , BC144861 , BC144862 , BC145617
UniProt ID:	Q3UP24
Summary:	Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis. The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria. It senses pathogenic proteins of the type III secretion system (T3SS) and type IV secretion system (T4SS) such as flagellin and PrgJ-like rod proteins via the Naip proteins (Naip1, Naip2 or Naip5): specific Naip proteins recognize and bind pathogenic proteins, driving assembly and activation of the NLRC4 inflammasome. The NLRC4 inflammasome senses Gram-negative bacteria such as <i>L.pneumophila</i> and <i>P.aeruginosa</i> , enteric pathogens <i>S.typhimurium</i> (<i>Salmonella</i>) and <i>S.flexneri</i> and fungal pathogen <i>C.albicans</i> . In intestine, the NLRC4 inflammasome is able to discriminate between commensal and pathogenic bacteria and specifically drives production of interleukin-1 beta (IL1B) in response to infection by <i>Salmonella</i> or <i>P.aeruginosa</i> . In case of <i>L.pneumophila</i> infection the inflammasome acts by activating caspase-7.[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).