

## **Product datasheet for TL303046**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## NALP2 (NLRP2) Human shRNA Plasmid Kit (Locus ID 55655)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** NALP2 (NLRP2) Human shRNA Plasmid Kit (Locus ID 55655)

**Locus ID:** 55655

Synonyms: CLR19.9; NALP2; NBS1; PAN1; PYPAF2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** NLRP2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 55655).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: BC001039, NM 001174081, NM 001174082, NM 001174083, NM 017852, NM 001348003,

NR 145325, NM 017852.1, NM 017852.2, NM 017852.3, NM 017852.4, NM 001174083.1, NM 001174082.1, NM 001174082.2, NM 001174081.1, NM 001174081.2, BC001039.2,

BC003592, BC039269, NM 001174083.2, NM 001174081.3

UniProt ID: O9NX02

**Summary:** This gene is a member of the nucleotide-binding and leucine-rich repeat receptor (NLR)

family, and is predicted to contain an N-terminal pyrin effector domain (PYD), a centrally-located nucleotide-binding and oligomerization domain (NACHT) and C-terminal leucine-rich repeats (LRR). Members of this gene family are thought to be important regulators of immune responses. This gene product interacts with components of the IkB kinase (IKK) complex, and

can regulate both caspase-1 and NF-kB (nuclear factor kappa-light-chain-enhancer of

activated B cells) activity. The pyrin domain is necessary and sufficient for suppression of NF-kB activity. An allelic variant (rs147585490) has been found that is incapable of blocking the transcriptional activity of NF-kB. Alternative splicing results in multiple transcript variants

encoding different isoforms. [provided by RefSeq, Dec 2016]

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>.



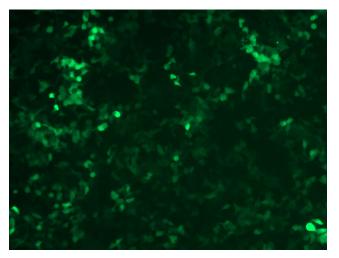


### Performance Guaranteed:

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.

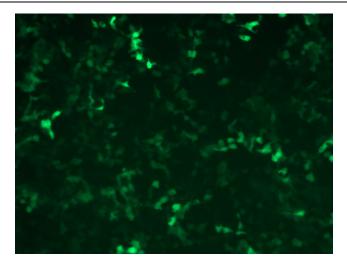
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

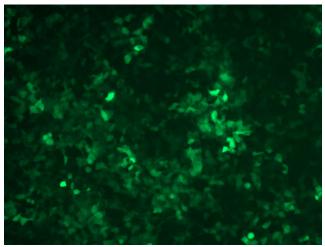


GFP signal was observed under microscope at 48 hours after transduction of TL303046A virus into HEK293 cells. TL303046A virus was prepared using lenti-shRNA TL303046A and [TR30037] packaging kit.

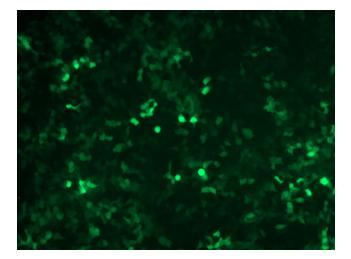




GFP signal was observed under microscope at 48 hours after transduction of TL303046B virus into HEK293 cells. TL303046B virus was prepared using lenti-shRNA TL303046B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL303046C] virus into HEK293 cells. [TL303046C] virus was prepared using lenti-shRNA [TL303046C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL303046D] virus into HEK293 cells. [TL303046D] virus was prepared using lenti-shRNA [TL303046D] and [TR30037] packaging kit.