

## Product datasheet for **TF320638**

### **CARD4 (NOD1) Human shRNA Plasmid Kit (Locus ID 10392)**

#### **Product data:**

|                                  |  |
|----------------------------------|--|
| <b>Product Type:</b>             | shRNA Plasmids   |
| <b>Product Name:</b>             | CARD4 (NOD1) Human shRNA Plasmid Kit (Locus ID 10392)  |
| <b>Locus ID:</b>                 | 10392  |
| <b>Synonyms:</b>                 | CARD4; CLR7.1; NLRC1   |
| <b>Vector:</b>                   | pRFP-C-RS (TR30014)  |
| <b>E. coli Selection:</b>        | Chloramphenicol (34 ug/ml)   |
| <b>Mammalian Cell Selection:</b> | Puromycin  |
| <b>Format:</b>                   | Retroviral plasmids  |
| <b>Components:</b>               | NOD1 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 10392).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.   |
| <b>RefSeq:</b>                   | <a href="#">NM_006092</a> , <a href="#">NM_001354849</a> , <a href="#">NR_149002</a> , <a href="#">NM_006092.1</a> , <a href="#">NM_006092.2</a> , <a href="#">BC040339</a> ,<br><a href="#">BC040339.1</a> , <a href="#">BC020114</a> , <a href="#">NM_006092.4</a>   |
| <b>UniProt ID:</b>               | <a href="#">Q9Y239</a>   |
| <b>Summary:</b>                  | This gene encodes a member of the nucleotide-binding oligomerization domain (NOD)-like receptor (NLR) family of proteins. The encoded protein plays a role in innate immunity by acting as a pattern-recognition receptor (PRR) that binds bacterial peptidoglycans and initiates inflammation. This protein has also been implicated in the immune response to viral and parasitic infection. Major structural features of this protein include an N-terminal caspase recruitment domain (CARD), a centrally located nucleotide-binding domain (NBD), and 10 tandem leucine-rich repeats (LRRs) in its C terminus. The CARD is involved in apoptotic signaling, LRRs participate in protein-protein interactions, and mutations in the NBD may affect the process of oligomerization and subsequent function of the LRR domain. Mutations in this gene are associated with asthma, inflammatory bowel disease, Behcet disease and sarcoidosis in human patients. [provided by RefSeq, Aug 2017] |
| <b>shRNA Design:</b>             | 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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .   |



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**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).