

## Product datasheet for **TR500466**

### Cybb Mouse shRNA Plasmid (Locus ID 13058)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Cybb Mouse shRNA Plasmid (Locus ID 13058)
Locus ID:	13058
Synonyms:	C88302; Cgd; CGD91-phox; Cyd; gp91-1; gp91
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cybb - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 13058). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC071229</a> , <a href="#">NM_007807</a> , <a href="#">NM_007807.1</a> , <a href="#">NM_007807.2</a> , <a href="#">NM_007807.3</a> , <a href="#">NM_007807.4</a> , <a href="#">NM_007807.5</a> , <a href="#">BC003910</a> , <a href="#">BC042838</a>
UniProt ID:	<a href="#">Q61093</a>
Summary:	This gene encodes the heavy chain component of a heterodimeric transmembrane ion transporter composed of both a heavy and a light chain. This transporter mediates the transfer of electrons from nicotinamide adenine dinucleotide phosphate (NADPH) to oxygen to generate superoxide. This reaction is important in the innate immune response to pathogens. However, increased activity of the encoded protein also leads to the generation of reactive oxygen species that result in oxidative stress and can cause tissue damage. Conversely, loss of function of the related gene in human causes chronic granulomatous disease. Alternative splicing results in multiple transcript variants, although the full-length nature of some of these variants has not been determined. [provided by RefSeq, May 2013]
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 <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).