

## Product datasheet for **TR512004**

### **Bhlhe22 Mouse shRNA Plasmid (Locus ID 59058)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	Bhlhe22 Mouse shRNA Plasmid (Locus ID 59058)
Locus ID:	59058
Synonyms:	Beta3; Beta3a; Bhlhb5
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Bhlhe22 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 59058). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC053007</a> , <a href="#">NM_021560</a> , <a href="#">NM_021560.1</a> , <a href="#">NM_021560.2</a> , <a href="#">NM_021560.3</a> , <a href="#">NM_021560.4</a>
UniProt ID:	<a href="#">Q8C6A8</a>
Summary:	Inhibits DNA binding of TCF3/E47 homodimers and TCF3 (E47)/NEUROD1 heterodimers and acts as a strong repressor of Neurod1 and Myod-responsive genes, probably by heterodimerization with class a basic helix-loop-helix factors. Despite the presence of an intact basic domain, does not bind to DNA (By similarity). In the brain, may function as an area-specific transcription factor that regulates the postmitotic acquisition of area identities and elucidate the genetic hierarchy between progenitors and postmitotic neurons driving neocortical arealization. May be required for the survival of a specific population of inhibitory neurons in the superficial laminae of the spinal chord dorsal horn that may regulate pruritis. Seems to play a crucial role in the retinogenesis, in the specification of amacrine and bipolar subtypes. Forms with PRDM8 a transcriptional repressor complex controlling genes involved in neural development and neuronal differentiation (PubMed:22284184).[UniProtKB/Swiss-Prot Function]
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> .



[View online »](#)

**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).