

## Product datasheet for TR312475

### HEXA Human shRNA Plasmid Kit (Locus ID 3073)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	HEXA Human shRNA Plasmid Kit (Locus ID 3073)
Locus ID:	3073
Synonyms:	TSD
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	HEXA - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 3073). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_000520</a> , <a href="#">NM_001318825</a> , <a href="#">NR_134869</a> , <a href="#">NM_000520.1</a> , <a href="#">NM_000520.2</a> , <a href="#">NM_000520.3</a> , <a href="#">NM_000520.4</a> , <a href="#">NM_000520.5</a> , <a href="#">BC018927</a> , <a href="#">BC018927.2</a> , <a href="#">BC001138</a> , <a href="#">BC021030</a> , <a href="#">BC034424</a> , <a href="#">BC084537</a> , <a href="#">BM668409</a> , <a href="#">NM_000520.6</a>
UniProt ID:	<a href="#">P06865</a>
Summary:	This gene encodes a member of the glycosyl hydrolase 20 family of proteins. The encoded preproprotein is proteolytically processed to generate the alpha subunit of the lysosomal enzyme beta-hexosaminidase. This enzyme, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Mutations in this gene lead to an accumulation of GM2 ganglioside in neurons, the underlying cause of neurodegenerative disorders termed the GM2 gangliosidoses, including Tay-Sachs disease (GM2-gangliosidosis type I). Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 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 <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).