

## Product datasheet for **TR502369**

### Ube3a Mouse shRNA Plasmid (Locus ID 22215)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Ube3a Mouse shRNA Plasmid (Locus ID 22215)
Locus ID:	22215
Synonyms:	4732496B02; 5830462N02Rik; A130086L21Rik; Hpve6a; mKIAA4216
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ube3a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 22215). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC131658</a> , <a href="#">BC131659</a> , <a href="#">NM_001033962</a> , <a href="#">NM_011668</a> , <a href="#">NM_173010</a> , <a href="#">NM_173010.1</a> , <a href="#">NM_173010.2</a> , <a href="#">NM_173010.3</a> , <a href="#">NM_011668.1</a> , <a href="#">NM_011668.2</a> , <a href="#">NM_001033962.1</a> , <a href="#">BC094605</a> , <a href="#">NM_001033962.2</a> , <a href="#">NM_011668.3</a>
UniProt ID:	<a href="#">O08759</a>
Summary:	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and transfers it to its substrates. Several substrates have been identified including the ARNTL/BMAL1, ARC, RAD23A and RAD23B, MCM7 (which is involved in DNA replication), annexin A1, the PML tumor suppressor, and the cell cycle regulator CDKN1B (PubMed:20211139, PubMed:24728990). Additionally, may function as a cellular quality control ubiquitin ligase by helping the degradation of the cytoplasmic misfolded proteins. Finally, UBE3A also promotes its own degradation in vivo (By similarity). Plays an important role in the regulation of the circadian clock: involved in the ubiquitination of the core clock component ARNTL/BMAL1, leading to its proteasomal degradation (PubMed:24728990). Acts as a regulator of synaptic development by mediating ubiquitination and degradation of ARC (PubMed:20211139). Synergizes with WBP2 in enhancing PGR activity (By similarity). [UniProtKB/Swiss-Prot Function]



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**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 [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**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).