

# Product datasheet for TL505445V

# OriGene Technologies, Inc.

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## Usp8 Mouse shRNA Lentiviral Particle (Locus ID 84092)

### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Locus ID:** 84092

**Synonyms:** AI574262; AW557536; mKIAA0055; Ubpy

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Usp8 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: <u>BC050947, BC061465, BC066126, NM\_001252580, NM\_019729, NM\_019729.1, NM\_019729.2</u>,

NM\_019729.3, NM\_001252580.1, BC027052, BC038123, BC092078

UniProt ID: Q80U87

**Summary:** Hydrolase that can remove conjugated ubiquitin from proteins and therefore plays an

important regulatory role at the level of protein turnover by preventing degradation. Converts both 'Lys-48' an 'Lys-63'-linked ubiquitin chains. Catalytic activity is enhanced in the M phase. Involved in cell proliferation. Required to enter into S phase in response to serum stimulation. May regulate T-cell anergy mediated by RNF128 via the formation of a complex containing

RNF128 and OTUB1. Probably regulates the stability of STAM2 and RASGRF1. Regulates endosomal ubiquitin dynamics, cargo sorting, membrane traffic at early endosomes, and

maintenance of ESCRT-0 stability. The level of protein ubiquitination on endosomes is essential for maintaining the morphology of the organelle. Deubiquitinates EPS15 and controles tyrosine kinase stability. Removes conjugated ubiquitin from EGFR thus regulating EGFR degradation and downstream MAPK signaling. Involved in acrosome biogenesis through

interaction with the spermatid ESCRT-0 complex and microtubules. Deubiquitinates BIRC6/bruce and KIF23/MKLP1 (By similarity). Deubiquitinates BACE1 which inhibits BACE1 lysosomal degradation and modulates BACE-mediated APP cleavage and amyloid-beta

formation (By similarity).[UniProtKB/Swiss-Prot Function]





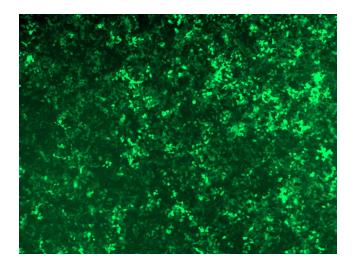
#### shRNA Design:

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 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 quaranteed 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.

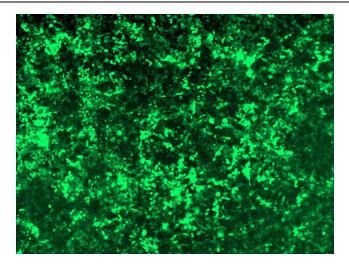
> For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

## **Product images:**

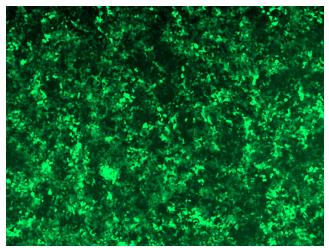


GFP signal was observed under microscope at 48 hours after transduction of TL505445A virus into HEK293 cells. TL505445A virus was prepared using lenti-shRNA TL505445A and [TR30037] packaging kit.

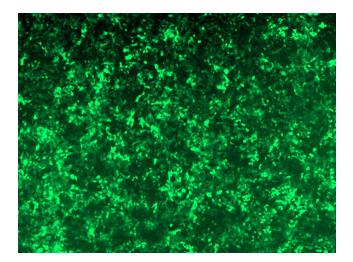




GFP signal was observed under microscope at 48 hours after transduction of TL505445B virus into HEK293 cells. TL505445B virus was prepared using lenti-shRNA TL505445B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL505445C] virus into HEK293 cells. [TL505445C] virus was prepared using lenti-shRNA [TL505445C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL505445D] virus into HEK293 cells. [TL505445D] virus was prepared using lenti-shRNA [TL505445D] and [TR30037] packaging kit.