

## **Product datasheet for TR705724**

## Usp30 Rat shRNA Plasmid (Locus ID 304579)

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Usp30 Rat shRNA Plasmid (Locus ID 304579)

**Locus ID:** 304579

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Usp30 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

304579). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** <u>NM 001107153, NM 001107153.1</u>

UniProt ID: <u>D3ZPG5</u>

**Summary:** Deubiquitinating enzyme tethered to the mitochondrial outer membrane that acts as a key

inhibitor of mitophagy by counteracting the action of parkin (PRKN): hydrolyzes ubiquitin attached by parkin on target proteins, such as RHOT1/MIRO1 and TOMM20, thereby blocking parkin's ability to drive mitophagy (PubMed:24896179). Preferentially cleaves 'Lys-6'- and 'Lys-11'-linked polyubiquitin chains, 2 types of linkage that participate to mitophagic signaling. Does not cleave efficiently polyubiquitin phosphorylated at 'Ser-65' (By similarity). Acts as negative regulator of mitochondrial fusion by mediating deubiquitination of MFN1 and MFN2

(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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).