

Product datasheet for TR515047

Sqstm1 Mouse shRNA Plasmid (Locus ID 18412)

Product data:

OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Sqstm1 Mouse shRNA Plasmid (Locus ID 18412)
Locus ID:	18412
Synonyms:	A170; OSF-6; Osi; p62; STAP; STONE14
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Sqstm1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 18412). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC006019</u> , <u>NM_001290769</u> , <u>NM_011018</u> , <u>NM_011018.1</u> , <u>NM_011018.2</u> , <u>NM_011018.3</u> , <u>NM_001290769.1</u>
UniProt ID:	<u>Q64337</u>



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ORIGENE Sqstm1 Mouse shRNA Plasmid (Locus ID 18412) – TR515047

Summary:	Autophagy receptor required for selective macroautophagy (aggrephagy). Functions as a bridge between polyubiquitinated cargo and autophagosomes. Interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family. Required both for the formation and autophagic degradation of polyubiquitin-containing bodies, called ALIS (aggresome-like induced structures) and links ALIS to the autophagic machinery. Involved in midbody ring degradation (By similarity). May regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates the interaction between TRAF6 and CYLD (PubMed:14960283, PubMed:18382763). May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. Involved in endosome organization by retaining vesicles in the perinuclear cloud: following ubiquitination by RNF26, attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport (By similarity). Promotes relocalization of 'Lys-63'-linked ubiquitinated TMEM173/STING to autophagosomes (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 <u>custom shRNA service</u>.

PerformanceOriGene guarantees that the sequences in the shRNA expression cassettes are verified toGuaranteed: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).

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