

## Product datasheet for TR502825

## Fbxo18 Mouse shRNA Plasmid (Locus ID 50755)

## **Product data:**

## OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Fbxo18 Mouse shRNA Plasmid (Locus ID 50755)
Locus ID:	50755
Synonyms:	AU015756; Fbh1; Fbx18
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Fbxo18 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 50755). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC031393, NM 001348234, NM 001348235, NM 001348236, NM 001348237, NM 015792, NM 015792, NM 015792, NM 015792.2, BC004036</u>
UniProt ID:	<u>Q8K2I9</u>
Summary:	3'-5' DNA helicase and substrate-recognition component of the SCF(FBH1) E3 ubiquitin ligase complex that plays a key role in response to stalled/damaged replication forks (By similarity). Involved in genome maintenance by acting as an anti-recombinogenic helicase and preventing extensive strand exchange during homologous recombination: promotes RAD51 filament dissolution from stalled forks, thereby inhibiting homologous recombination and preventing excessive recombination (PubMed:24108124). Also promotes cell death and DNA double-strand breakage in response to replication stress: together with MUS81, promotes the endonucleolytic DNA cleavage following prolonged replication stress via its helicase activity, possibly to eliminate cells with excessive replication stress. Plays a major role in remodeling of stalled DNA forks by catalyzing fork regression, in which the fork reverses and the two nascent DNA strands anneal. In addition to the helicase activity, also acts as the substrate- recognition component of the SCF(FBH1) E3 ubiquitin ligase complex, a complex that mediates ubiquitination of RAD51, leading to regulate RAD51 subcellular location (By similarity).[UniProtKB/Swiss-Prot Function]



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	Fbxo18 Mouse shRNA Plasmid (Locus ID 50755) – TR502825
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> .
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).

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