

Product datasheet for TL312245

OriGene Technologies, Inc.

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IFIT2 Human shRNA Plasmid Kit (Locus ID 3433)

Product data:

Product Type: shRNA Plasmids

Product Name: IFIT2 Human shRNA Plasmid Kit (Locus ID 3433)

Locus ID: 3433

Synonyms: cig42; G10P2; GARG-39; IFI-54; IFI-54K; IFI54; IFIT-2; ISG-54 K; ISG-54K; ISG54; P54

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: IFIT2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3433). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001547, NM 001547.2, NM 001547.3, NM 001547.4, BC032839, BC032839.2, BC005987

UniProt ID: P09913

Summary: IFN-induced antiviral protein which inhibits expression of viral messenger RNAs lacking 2'-O-

methylation of the 5' cap. The ribose 2'-O-methylation would provide a molecular signature to distinguish between self and non-self mRNAs by the host during viral infection. Viruses evolved several ways to evade this restriction system such as encoding their own 2'-O-methylase for their mRNAs or by stealing host cap containing the 2'-O-methylation (cap snatching mechanism). Binds AU-rich viral RNAs, with or without 5' triphosphorylation, RNA-binding is required for antiviral activity. Can promote apoptosis.[UniProtKB/Swiss-Prot

Function1

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>.

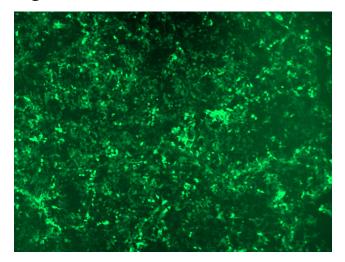


Performance Guaranteed:

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.

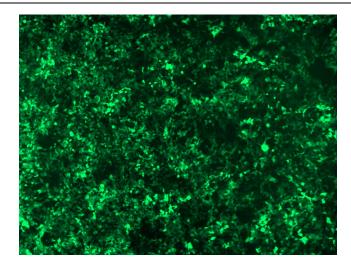
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

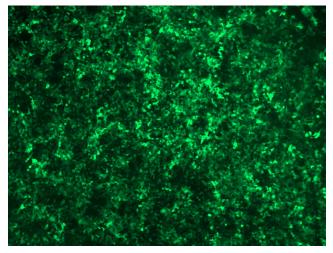


GFP signal was observed under microscope at 48 hours after transduction of TL312245A virus into HEK293 cells. TL312245A virus was prepared using lenti-shRNA TL312245A and [TR30037] packaging kit.

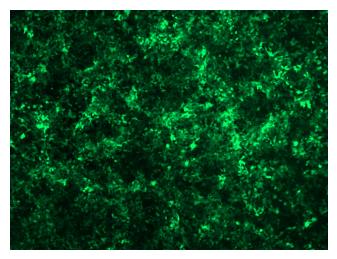




GFP signal was observed under microscope at 48 hours after transduction of TL312245B virus into HEK293 cells. TL312245B virus was prepared using lenti-shRNA TL312245B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312245C] virus into HEK293 cells. [TL312245C] virus was prepared using lenti-shRNA [TL312245C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312245D] virus into HEK293 cells. [TL312245D] virus was prepared using lenti-shRNA [TL312245D] and [TR30037] packaging kit.