

Product datasheet for TR319730

OriGene Technologies, Inc.

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FKBP12 (FKBP1A) Human shRNA Plasmid Kit (Locus ID 2280)

Product data:

Product Type: shRNA Plasmids

Product Name: FKBP12 (FKBP1A) Human shRNA Plasmid Kit (Locus ID 2280)

Locus ID: 2280

Synonyms: FKBP-1A; FKBP-12; FKBP1; FKBP12; PKC12; PFIASE

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: FKBP1A - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2280). 5µg purified plasmid DNA per construct

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

RefSeq: NM 000801, NM 001199786, NM 054014, NM 054014.1, NM 054014.2, NM 054014.3,

NM 000801.1, NM 000801.2, NM 000801.3, NM 000801.4, NM 001199786.1, BC005147,

BC005147.2, BC001925, BC001925.1, BC119732, BC119733, NM 000801.5

UniProt ID: P62942

Summary: The protein encoded by this gene is a member of the immunophilin protein family, which play

a role in immunoregulation and basic cellular processes involving protein folding and trafficking. The protein is a cis-trans prolyl isomerase that binds the immunosuppressants FK506 and rapamycin. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. It also interacts with multiple intracellular calcium release channels, and coordinates multi-protein complex formation of the tetrameric skeletal muscle ryanodine receptor. In mouse, deletion of this homologous gene causes congenital heart disorder known as noncompaction of left ventricular myocardium. Multiple alternatively spliced variants, encoding the same protein, have been identified. The human genome contains five pseudogenes related to this gene, at least one of which is transcribed. [provided

by RefSeq, Sep 2008]

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).