

Product datasheet for TR313321

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Possible 200 Redical Center Drive, Ste 200 Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

E2F2 Human shRNA Plasmid Kit (Locus ID 1870)

Product data:

Product Type: shRNA Plasmids

Product Name: E2F2 Human shRNA Plasmid Kit (Locus ID 1870)

Locus ID: 1870 Synonyms: E2F-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: E2F2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1870). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC007609</u>, <u>NM 004091</u>, <u>NM 004091.2</u>, <u>BC007609.1</u>, <u>BC053676</u>, <u>BC053676.1</u>, <u>NM 004091.4</u>

UniProt ID: Q14209

Summary: The protein encoded by this gene is a member of the E2F family of transcription factors. The

E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the

family. These domains include a DNA binding domain, a dimerization domain which

determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F1 and E2F3, have an additional cyclin binding domain. This protein binds specifically to retinoblastoma protein pRB in a cell-cycle dependent manner, and it

exhibits overall 46% amino acid identity to E2F1. [provided by RefSeq, Jul 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).