

Product datasheet for TG302218

OriGene Technologies, Inc.

9620 Medical 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

PTBP1 Human shRNA Plasmid Kit (Locus ID 5725)

Product data:

Product Type: shRNA Plasmids

Product Name: PTBP1 Human shRNA Plasmid Kit (Locus ID 5725)

Locus ID: 5725

Synonyms: HNRNP-I; HNRNPI; HNRPI; pPTB; PTB-1; PTB-T; PTB2; PTB3; PTB4

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: PTBP1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5725).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 002819, NM 031990, NM 031991, NM 175847, NM 002819.1, NM 002819.2,

NM 002819.3, NM 002819.4, NM 031991.1, NM 031991.2, NM 031991.3, NM 031990.1, NM 031990.2, NM 031990.3, NM 175847.1, NM 175847.2, BC002397, BC002397.2, BC004383,

BC004383.1, BC013694, BC023219, NM 031990.4, NM 031991.4, NM 002819.5

UniProt ID: P26599

Summary: This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear

ribonucleoproteins (hnRNPs). The hnRNPs are RNA-binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the

nucleus and appear to influence pre-mRNA processing and other aspects of mRNA

metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. The protein encoded by this gene has four repeats of quasi-RNA

recognition motif (RRM) domains that bind RNAs. This protein binds to the intronic

polypyrimidine tracts that requires pre-mRNA splicing and acts via the protein degradation ubiquitin-proteasome pathway. It may also promote the binding of U2 snRNP to pre-mRNAs.

This protein is localized in the nucleoplasm and it is also detected in the perinucleolar structure. Alternatively spliced transcript variants encoding different isoforms have been

described. [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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).