

Product datasheet for TL702093

Pgbp1 Rat shRNA Plasmid (Locus ID 302557)

Product data:

Product Type: shRNA Plasmids

Product Name: Pqbp1 Rat shRNA Plasmid (Locus ID 302557)

Locus ID: 302557

pGFP-C-shLenti (TR30023) Vector:

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Pgbp1 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 302557). 5µg Components:

purified plasmid DNA per construct

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

RefSeq: NM 001013957, NM 001013957.1, BC059163

UniProt ID: Q6PCT5

Summary: Intrinsically disordered protein that acts as a scaffold, and which is involved in different

> processes, such as pre-mRNA splicing, transcription regulation, innate immunity and neuron development. Interacts with splicing-related factors via the intrinsically disordered region and regulates alternative splicing of target pre-mRNA species. May suppress the ability of POU3F2 to transactivate the DRD1 gene in a POU3F2 dependent manner. Can activate transcription directly or via association with the transcription machinery. May be involved in ATXN1 mutant-induced cell death. The interaction with ATXN1 mutant reduces levels of

phosphorylated RNA polymerase II large subunit. Involved in the assembly of cytoplasmic stress granule, possibly by participating to the transport of neuronal RNA granules. Also acts

as an innate immune sensor of infection by retroviruses, by detecting the presence of reverse-transcribed DNA in the cytosol. Directly binds retroviral reverse-transcribed DNA in the cytosol and interacts with CGAS, leading to activate the cGAS-STING signaling pathway,

triggering type-I interferon production.[UniProtKB/Swiss-Prot Function]

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 custom shRNA service.



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

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



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).