

## **Product datasheet for TR310088**

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## **PSTPIP1** Human shRNA Plasmid Kit (Locus ID 9051)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** PSTPIP1 Human shRNA Plasmid Kit (Locus ID 9051)

**Locus ID:** 9051

Synonyms: CD2BP1; CD2BP1L; CD2BP1S; H-PIP; PAPAS; PSTPIP

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: PSTPIP1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

9051). 5µg purified plasmid DNA per construct

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

**RefSeq:** NM 001321135, NM 001321136, NM 001321137, NM 003978, NR 135552, NM 003978.1,

NM 003978.2, NM 003978.3, NM 003978.4, BC008602, BC008602.1, NM 003978.5

UniProt ID: <u>043586</u>

**Summary:** This gene encodes a cytoskeletal protein that is highly expressed in hemopoietic tissues. This

protein functions via its interaction with several different proteins involved in cytoskeletal organization and inflammatory processes. It binds to the cytoplasmic tail of CD2, an effector of T cell activation and adhesion, downregulating CD2-triggered adhesion. It binds PEST-type protein tyrosine phosphatases (PTP) and directs them to c-Abl kinase to mediate c-Abl dephosphorylation, thereby, regulating c-Abl activity. It also interacts with pyrin, which is found in association with the cytoskeleton in myeloid/monocytic cells and modulates immunoregulatory functions. Mutations in this gene are associated with PAPA (pyogenic sterile arthritis, pyoderma gangrenosum, and acne) syndrome. It is hypothesized that the disease-causing mutations compromise physiologic signaling necessary for the maintenance

of a proper inflammatory response. [provided by RefSeq, Mar 2016]

**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).