

Product datasheet for TL302199

OriGene Technologies, Inc.

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PTP alpha (PTPRA) Human shRNA Plasmid Kit (Locus ID 5786)

Product data:

Product Type: shRNA Plasmids

Product Name: PTP alpha (PTPRA) Human shRNA Plasmid Kit (Locus ID 5786)

Locus ID: 5786

Synonyms: HEPTP; HLPR; HPTPA; HPTPalpha; LRP; PTPA; PTPRL2; R-PTP-alpha; RPTPA

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: PTPRA - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5786).

5µg purified plasmid DNA per construct

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

RefSeq: NM 002836, NM 080840, NM 080841, NM 080841.1, NM 080841.2, NM 002836.1,

NM 002836.2, NM 002836.3, NM 080840.1, NM 080840.2, BC027308, BC027308.1

UniProt ID: P18433

Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP)

family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. This PTP has been shown to dephosphorylate and activate Src family tyrosine kinases, and is implicated in the regulation of integrin signaling, cell adhesion and proliferation. Three alternatively spliced variants of this gene, which encode two distinct isoforms, have been reported. [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 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).