

## **Product datasheet for TR310086**

#### OriGene Technologies, Inc.

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### PTCH1 Human shRNA Plasmid Kit (Locus ID 5727)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** PTCH1 Human shRNA Plasmid Kit (Locus ID 5727)

Locus ID: 5727

Synonyms: BCNS; NBCCS; PTC; PTC1; PTCH

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: PTCH1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5727). 5µg purified plasmid DNA per construct

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

RefSeq: NM 000264, NM 001083602, NM 001083603, NM 001083604, NM 001083605,

NM 001083606, NM 001083607, NM 001354918, NM 001354919, NR 149061, NM 001083607.1, NM 000264.1, NM 000264.2, NM 000264.3, NM 001083602.1, NM 001083604.1, NM 001083605.1, NM 001083603.1, NM 001083606.1, BC043542,

BC152919, BM974119, NM 001083602.3, NM 000264.5, NM 001083606.3, NM 001083605.2,

NM 001083604.2, NM 001083607.2, NM 001083603.3

UniProt ID: Q13635

**Summary:** This gene encodes a member of the patched family of proteins and a component of the

hedgehog signaling pathway. Hedgehog signaling is important in embryonic development and tumorigenesis. The encoded protein is the receptor for the secreted hedgehog ligands, which include sonic hedgehog, indian hedgehog and desert hedgehog. Following binding by one of the hedgehog ligands, the encoded protein is trafficked away from the primary cilium, relieving inhibition of the G-protein-coupled receptor smoothened, which results in activation of downstream signaling. Mutations of this gene have been associated with basal cell nevus

syndrome and holoprosencephaly. [provided by RefSeq, Aug 2017]

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).