

Product datasheet for TL312091

OriGene Technologies, Inc.

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ITGA8 Human shRNA Plasmid Kit (Locus ID 8516)

Product data:

Product Type: shRNA Plasmids

Product Name: ITGA8 Human shRNA Plasmid Kit (Locus ID 8516)

Locus ID: 8516

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell Puromycin

Selection:

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Format: Lentiviral plasmids

Components: ITGA8 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 8516).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001291494, NM 003638, NM 003638.1, NM 003638.2, NM 001291494.1, BC148352

UniProt ID: P53708

Summary: Integrins are heterodimeric transmembrane receptor proteins that mediate numerous

cellular processes including cell adhesion, cytoskeletal rearrangement, and activation of cell signaling pathways. Integrins are composed of alpha and beta subunits. This gene encodes the alpha 8 subunit of the heterodimeric integrin alpha8beta1 protein. The encoded protein is a single-pass type 1 membrane protein that contains multiple FG-GAP repeats. This repeat is predicted to fold into a beta propeller structure. This gene regulates the recruitment of mesenchymal cells into epithelial structures, mediates cell-cell interactions, and regulates neurite outgrowth of sensory and motor neurons. The integrin alpha8beta1 protein thus plays an important role in wound-healing and organogenesis. Mutations in this gene have been associated with renal hypodysplasia/aplasia-1 (RHDA1) and with several animal models of chronic kidney disease. Alternate splicing results in multiple transcript variants encoding

distinct isoforms. [provided by RefSeq, Apr 2014]

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).