

Product datasheet for TR303091

MXRA8 Human shRNA Plasmid Kit (Locus ID 54587)

Product data:

Product Type: shRNA Plasmids

Product Name: MXRA8 Human shRNA Plasmid Kit (Locus ID 54587)

Locus ID: 54587 Synonyms: ASP3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MXRA8 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

54587). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001282582, NM 001282583, NM 001282584, NM 001282585, NM 032348, NM 032348.2,

NM 032348.3, NM 001282584.1, NM 001282583.1, NM 001282582.1, NM 001282585.1,

BC006213, BC017312, NM 032348.4, NM 001282583.2

UniProt ID: Q9BRK3

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Summary:

Transmembrane protein which can modulate activity of various signaling pathways, probably via binding to integrin ITGAV:ITGB3 (PubMed:22492581, PubMed:23386276). Mediates heterophilic cell-cell interactions in vitro (By similarity). Inhibits osteoclastogenesis downstream of TNFSF11/RANKL and CSF1, where it may function by attenuating signaling via integrin ITGB3 and MAP kinase p38 (By similarity). Plays a role in cartilage formation where it promotes proliferation and maturation of growth plate chondrocytes (By similarity). Stimulates formation of primary cilia in chondrocytes (By similarity). Enhances expression of genes involved in the hedgehog signaling pathway in chondrocytes, including the hedgehog signaling molecule IHH; may also promote signaling via the PTHLH/PTHrP pathway (By similarity). Plays a role in angiogenesis where it suppresses migration of endothelial cells and also promotes their apoptosis (PubMed:23386276). Inhibits VEGF-induced activation of AKT and p38 MAP kinase in endothelial cells (PubMed:23386276). Also inhibits VTN (vitronectin)-mediated integrin ITGAV:ITGB3 signaling and activation of PTK2/FAK (PubMed:23386276). May play a role in the maturation and maintenance of the blood-brain barrier (By similarity). [UniProtKB/Swiss-Prot Function]

shRNA Design:

Performance Guaranteed:

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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).