

## **Product datasheet for TR311445**

## OriGene Technologies, Inc.

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## MMP14 Human shRNA Plasmid Kit (Locus ID 4323)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** MMP14 Human shRNA Plasmid Kit (Locus ID 4323)

**Locus ID:** 4323

Synonyms: MMP-14; MMP-X1; MT-MMP; MT-MMP 1; MT1-MMP; MT1MMP; MTMMP1; WNCHRS

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: MMP14 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

4323). 5µg purified plasmid DNA per construct

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

RefSeq: NM 004995, NM 004995.1, NM 004995.2, NM 004995.3, BC064803, BC064803.1, BC039581,

NM 004995.4

UniProt ID: P50281

**Summary:** Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of

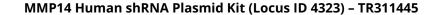
extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the protein encoded by this gene is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be

involved in tumor invasion. [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).