## -online.com Genomics



## Overview

| Quantity:    | 1 kit                   |
|--------------|-------------------------|
| Gene:        | FAM75A5 (SPATA31A5)     |
| Species:     | Human                   |
| Insert:      | shRNA                   |
| Vector:      | Retroviral Vector       |
| Application: | RNA Interference (RNAi) |

## Product Details

| Purpose:              | Pre-designed Hush-29 shRNAs in viral vectors with proven effectiveness for knock-down of  |
|-----------------------|---|
|                       | Human FAM75A5.  |
| Brand:                | HuSH-29™  |
| Vector Backbone:      | pRS   |
| Promoter:             | U6 Promoter   |
| Selectable Marker:    | Puromycin   |
| Bacterial Resistance: | Ampicillin  |
| Expression Type:      | Transient, Stable   |
| Specificity:          | <ul> <li>The HuSH shRNA gene-specific expression cassettes were optimized to include both the<br/>termination signal for RNA Pol III and GC content targeted at 50 % to further improve the<br/>quality of the gene-specific shRNA expression vectors.</li> </ul> |
|                       | • 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.   |
| Characteristics:      | <ul> <li>The shRNA gene-specific expression cassettes are prepared using synthetic<br/>oligonucleotides.</li> </ul>   |
|                       | These oligonucleotide sequences were computer designed for optimal suppression of gene  |

| Product Details |  |
|-----------------|--|
|                 | expression and minimal off-target effects.                                   |
|                 | All shRNA sequences are verified through DNA sequencing analysis.            |
| Components:     | • Gene-specific shRNA expression pRS vectors, 5 ug plasmid DNA per vial.     |
|                 | Four unique constructs per gene.   |
|                 | <ul> <li>HuSH 29-mer NonEffective Scrambled pRS 5 ug plasmid DNA.</li> </ul> |
|                 | •  |

## Target Details

| Gene:               | FAM75A5 (SPATA31A5)   |
|---------------------|---|
| Alternative Name:   | FAM75A5   |
| Application Details |   |
| Application Notes:  | <ul> <li>Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection.</li> <li>To properly assess knockdown, the gene expression level from the included scramble contro vector must be used in comparison with the target-specific shRNA transfected samples</li> </ul> |
| Restrictions:       | For Research Use only   |
| Handling            |   |
| Format:             | Lyophilized   |
| Storage:            | 4 °C/-20 °C   |
| Storage Comment:    | The dried plasmids can be stored at 4°C. However, once reconstituted with dH2O, the plasmids must be stored at -20°C.   |
| Publications        |   |
| Product cited in:   | Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (  |

1991)