For research purposes only, not for human use

# Product Data Sheet

## GEM siRNA (Human)

| Catalog # | Source | Reactivity | Applications |
|---|---|---|---|
| CRH1778 | Synthetic | H | RNAi |

**Description** siRNA to inhibit GEM expression using RNA interference

**Specificity** GEM siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.

**Form** Lyophilized powder

**Gene Symbol** GEM

**Alternative Names** KIR; GTP-binding protein GEM; GTP-binding mitogen-induced T-cell protein; RAS-like protein KIR

**Entrez Gene** 2669 (Human)

**SwissProt** P55040 (Human)

**Purity** > 97%

**Quality Control** Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.

**Components** We offers pre-designed sets of 3 different target-specific siRNA oligo duplexes of human GEM gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot.

| Component | 15 nmol | 30 nmol |
|---|---|---|
| GEM siRNA (Human) - A | 5 nmol x 1 | 5 nmol x 2 |

**Application key:** E- ELISA, WB- Western blot, IH- Immunohistochemistry, IF- Immunofluorescence, FC- Flow cytometry, IC- Immunocytochemistry, IP- Immunoprecipitation, ChIP- Chromatin Immunoprecipitation, EMSA- Electrophoretic Mobility Shift Assay, BL- Blocking, SE- Sandwich ELISA, CBE- Cell-based ELISA, RNAi- RNA interference
**Species reactivity key:** H- Human, M- Mouse, R- Rat, B- Bovine, C- Chicken, D- Dog, G- Goat, Mk- Monkey, P- Pig, Rb- Rabbit, S- Sheep, Z- Zebrafish


COHESION BIOSCIENCES LIMITED

WEB www.cohesionbio.com
ORDER order@cohesionbio.com
SUPPORT techsupport@cohesionbio.com
CUSTOM custom@cohesionbio.com

| | | |
|---|---|---|
| GEM siRNA (Human) - B | 5 nmol x 1 | 5 nmol x 2 |
| GEM siRNA (Human) - C | 5 nmol x 1 | 5 nmol x 2 |
| Negative Control | 2.5 nmol x 1 | 2.5 nmol x 2 |
| DEPC Water | 1 ml x 1 | 1 ml x 2 |

## Directions for Use

We recommends transfection with 10 nM - 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For example, resuspend one tube of 5 nmol siRNA oligo in 250 µl of DEPC water to get a final concentration of 20 µM.

| Plate | Final volume of medium | Final concentration of siRNA | siRNA (20 µM) | Lipofectamin 2000 |
|---|---|---|---|---|
| 96-well | 100 µl | 100 nM | 0.5 µl | 0.25 µl |
| | | 50 nM | 0.25 µl | 0.25 µl |
| | | 10 nM | 0.05 µl | 0.25 µl |
| 24-well | 500 µl | 100 nM | 2.5 µl | 1 µl |
| | | 50 nM | 1.25 µl | 1 µl |
| | | 10 nM | 0.25 µl | 1 µl |
| 12-well | 1 ml | 100 nM | 5 µl | 2 µl |
| | | 50 nM | 2.5 µl | 2 µl |
| | | 10 nM | 0.5 µl | 2 µl |
| 6-well | 2 ml | 100 nM | 10 µl | 5 µl |
| | | 50 nM | 5 µl | 5 µl |
| | | 10 nM | 1 µl | 5 µl |

## Storage/Stability

Shipped at 4 °C. Store at -20 °C for one year.

**Application key:** E- ELISA, WB- Western blot, IH- Immunohistochemistry, IF- Immunofluorescence, FC- Flow cytometry, IC- Immunocytochemistry, IP- Immunoprecipitation, ChIP- Chromatin Immunoprecipitation, EMSA- Electrophoretic Mobility Shift Assay, BL- Blocking, SE- Sandwich ELISA, CBE- Cell-based ELISA, RNAi- RNA interference
**Species reactivity key:** H- Human, M- Mouse, R- Rat, B- Bovine, C- Chicken, D- Dog, G- Goat, Mk- Monkey, P- Pig, Rb- Rabbit, S- Sheep, Z- Zebrafish