

# **Product Data Sheet**

### SPG11 siRNA (Human)

| Catalog #  | Source     | Reactivity  | Applications                     |  |  |  |
|--|------------|---|----------------------------------|--|--|--|
| CRJ2802  | Synthetic  | н   | RNAi                             |  |  |  |
| Description  | siRNA      | siRNA to inhibit SPG11 expression using RNA interference                            |                                  |  |  |  |
| Specificity  | SPG12      | SPG11 siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to  |                                  |  |  |  |
|  | knock      | down gene expressi  | on.                              |  |  |  |
| Form   | Lyoph      | ilized powder   |                                  |  |  |  |
| Gene Symbol  | SPG12      | SPG11   |                                  |  |  |  |
| Alternative N  | ames KIAA1 | KIAA1840; Spatacsin; Colorectal carcinoma-associated protein; Spastic paraplegia 11 |                                  |  |  |  |
|  | protei     | in  |                                  |  |  |  |
| Entrez Gene  | 80208      | 3 (Human)   |                                  |  |  |  |
| SwissProt  | Q96JI      | Q96JI7 (Human)  |                                  |  |  |  |
| Purity   | > 97%      | > 97%   |                                  |  |  |  |
| Quality Control Oligonucleotide synthesis is monitored bas |            |   | is monitored base by base throug | se by base through trityl analysis to ensure |  |  |
|  | appro      | appropriate coupling efficiency. The oligo is subsequently purified by affinity-    |                                  |  |  |  |
|  | phase      | phase extraction. The annealed RNA duplex is further analyzed by mass               |                                  |  |  |  |
|  | spect      | spectrometry to verify the exact composition of the duplex. Each lot is compared to |                                  |  |  |  |
|  | the pr     | revious lot by mass s   | pectrometry to ensure maximum    | lot-to-lot consistency.                      |  |  |
| Components   | We of      | We offers pre-designed sets of 3 different target-specific siRNA oligo duplexes of  |                                  |  |  |  |
|  | huma       | human SPG11 gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can  |                                  |  |  |  |
|  | be tra     | insfected individually  | or pooled together to achieve kr | nockdown of the target                       |  |  |
|  | gene,      | gene, which is most commonly assessed by qPCR or western blot.                      |                                  |  |  |  |
|  | Com        | ponent  | 15 nmol                          | 30 nmol                                      |  |  |
|  | SPG1       | L1 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                 | ORDER                 | SUPPORT                     | CUSTOM                 |
|---------------------|-----------------------|-----------------------------|------------------------|
| www.cohesionbio.com | order@cohesionbio.com | techsupport@cohesionbio.com | custom@cohesionbio.com |



# **Product Data Sheet**

| SPG11 siRNA (Human) - B | 5 nmol x 1   | 5 nmol x 2   |
|-------------------------|--------------|--------------|
| SPG11 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  $\mu$ l of DEPC water to get a final concentration of 20  $\mu$ M.

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

#### 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

### **COHESION BIOSCIENCES LIMITED**

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