

# **Product Data Sheet**

### EIF2AK4 siRNA (Human)

| Catalog #     | Source     | Reactivity                                                                            | Applications                     |                         |  |
|---------------|------------|---------------------------------------------------------------------------------------|----------------------------------|-------------------------|--|
| CRJ8244       | Synthetic  | н                                                                                     | RNAi                             |                         |  |
| Description   | siRNA      | to inhibit EIF2AK4 ex                                                                 | pression using RNA interference  | е                       |  |
| Specificity   | EIF2AI     | K4 siRNA (Human) is a                                                                 | a target-specific 19-23 nt siRNA | oligo duplexes designed |  |
|               | to kno     | ock down gene expres                                                                  | ssion.                           |                         |  |
| Form          | Lyoph      | ilized powder                                                                         |                                  |                         |  |
| Gene Symbol   | EIF2AI     | EIF2AK4                                                                               |                                  |                         |  |
| Alternative N | ames GCN2; | GCN2; KIAA1338; Eukaryotic translation initiation factor 2-alpha kinase 4; GCN2-like  |                                  |                         |  |
|               | protei     | n                                                                                     |                                  |                         |  |
| Entrez Gene   | 44027      | '5 (Human)                                                                            |                                  |                         |  |
| SwissProt     | Q9P2H      | Q9P2K8 (Human)                                                                        |                                  |                         |  |
| Purity        | > 97%      | > 97%                                                                                 |                                  |                         |  |
| Quality Contr | ol Oligor  | Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure |                                  |                         |  |
|               | appro      | appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid |                                  |                         |  |
|               | phase      | phase extraction. The annealed RNA duplex is further analyzed by mass                 |                                  |                         |  |
|               | spectr     | spectrometry to verify the exact composition of the duplex. Each lot is compared to   |                                  |                         |  |
|               | the pr     | the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.       |                                  |                         |  |
| Components    | We of      | We offers pre-designed sets of 3 different target-specific siRNA oligo duplexes of    |                                  |                         |  |
|               | humai      | human EIF2AK4 gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes      |                                  |                         |  |
|               | can be     | can be transfected individually or pooled together to achieve knockdown of the        |                                  |                         |  |
|               | target     | target gene, which is most commonly assessed by qPCR or western blot.                 |                                  |                         |  |
|               | Com        | ponent                                                                                | 15 nmol                          | 30 nmol                 |  |
|               | EIF2A      | AK4 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

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| EIF2AK4 siRNA (Human) - B | 5 nmol x 1   | 5 nmol x 2   |
|---------------------------|--------------|--------------|
| EIF2AK4 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 μl         |
| _       |              | 10 nM               | 0.25 μl       | 1 µl         |
|         |              | 100 nM              | 5 μl          | 2 µl         |
| 12-well | 1 ml         | 50 nM               | 2.5 μl        | 2 μΙ         |
| _       |              | 10 nM               | 0.5 μl        | 2 µl         |
|         |              | 100 nM              | 10 µl         | 5 µl         |
| 6-well  | 2 ml         | 50 nM               | 5 μl          | 5 μΙ         |
|         |              | 10 nM               | 1 µl          | 5 μΙ         |

#### Storage/Stability

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

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