IDT® miRNA Inhibitors

resuspension protocol

1. Centrifuge tubes before opening to ensure miRNA Inhibitor is at the bottom of the tube.
2. Resuspend miRNA Inhibitor in the appropriate volume of IDTE buffer, pH 8 (Cat # 11-01-02-05) or TE buffer to obtain the desired concentration.
   For example:

Product	Volume for 100 µM*
IDT miRNA Inhibitor, 5 nmol	50 µL
IDT miRNA Inhibitor, 20 nmol	200 µL

* Further dilutions of IDT miRNA Inhibitors can be made using IDTE, pH 8 or TE buffer.

3. Store resuspended IDT miRNA Inhibitors at –20°C for up to 24 months.

Note: see next page for transfection tips.

Tips for transfection of IDT miRNA Inhibitors into cultured cells

Successful miRNA modulation experiments require very high transfection efficiency of the miRNA inhibitors into cells:

- Typically, use methods similar to those designed for siRNA transfection (e.g., cationic lipids or electroporation). We routinely use Lipofectamine® 2000 (Thermo Fisher) in established cell lines, because it works well in a variety of cell lines.
- Perform preliminary experiments to optimize transfection conditions for primary or difficult-to-transfect cells.

Because miRNA function is based on recognition of a seed region rather than complete homology between miRNA and target, a single miRNA can regulate tens to hundreds of genes whose sequences do not share exact complementarity with the miRNA. Therefore, inhibition of a single miRNA will affect the expression of many genes. To ensure specificity, we recommend the following:

- Test the cells with various miRNA Inhibitors.
- Use the lowest possible amount of miRNA Inhibitors that results in the desired phenotype.