

Attn: FedEx Agent  
Description of package contents

## GENE TOOLS, LLC

17 June 2002 (rev. 20 March 2006)

### Morpholino Phosphorodiamidate Oligos for Antisense Research

Morpholino oligos are reagents for scientific research. Morpholinos are typically used by researchers to determine the functions of genes. A Morpholino binds to messenger RNA, suppressing synthesis of the corresponding protein or suppressing splicing of the messenger RNA.

**Morpholino oligos are synthetic chemicals.** They are not of biological origin. They cannot replicate themselves. They cannot be synthesized or replicated within any living thing. They are a **non-toxic, non-infectious chemical** that has the useful biophysical property of binding to RNA in a sequence-specific fashion.

Morpholino oligos are:

- **not** DNA, cDNA, RNA, mRNA, rRNA, tRNA or any other form of nucleic acid containing a ribose or deoxyribose component in its backbone;
- **not** a product isolated from any sort of organism;
- **not** capable of self-replication;
- **not** alive.

Packages from Gene Tools also sometimes contain these items:

- EPEI (ethoxylated polyethylenimine), a green aqueous solution used to escort Morpholinos into cultured cells;
- Cell scrapers, small plastic squeegees used to scrape cells off the surface of culture plates;
- Endo-Porter, a solution of short synthetic proteins that help Morpholinos enter cultured cells.