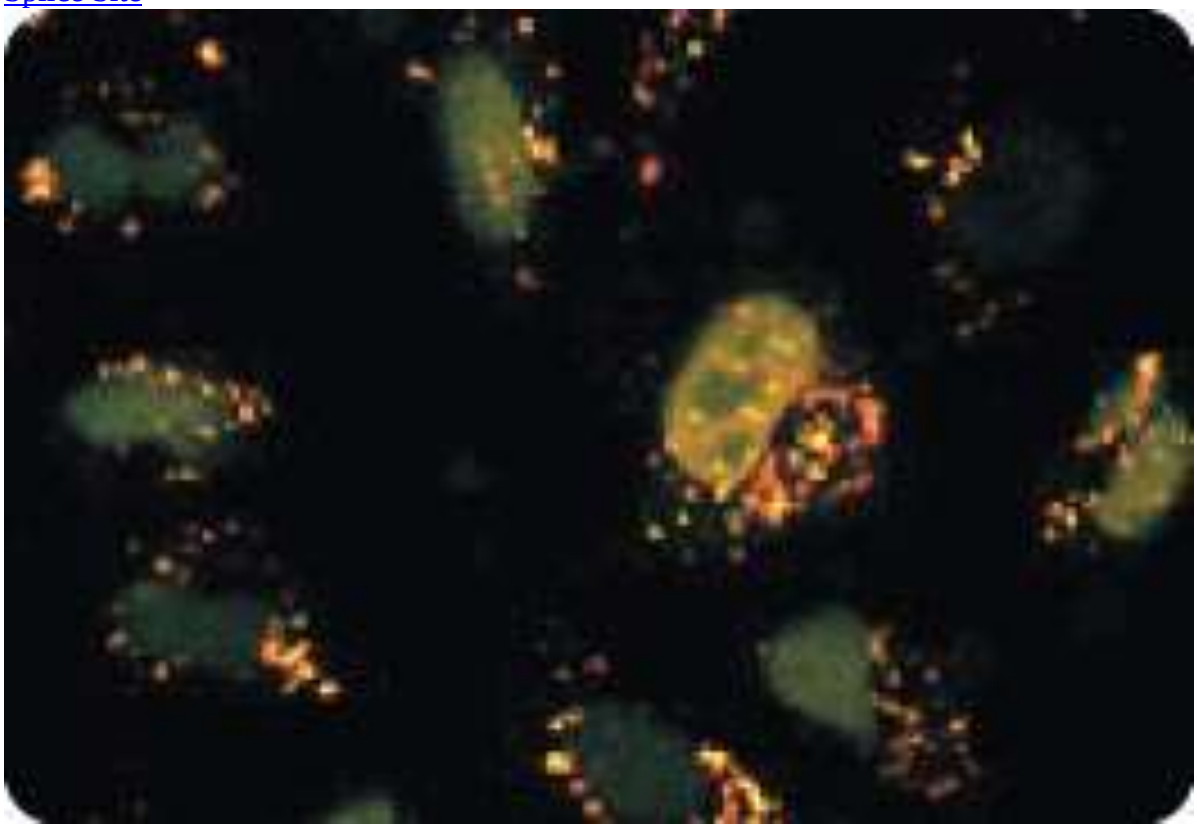
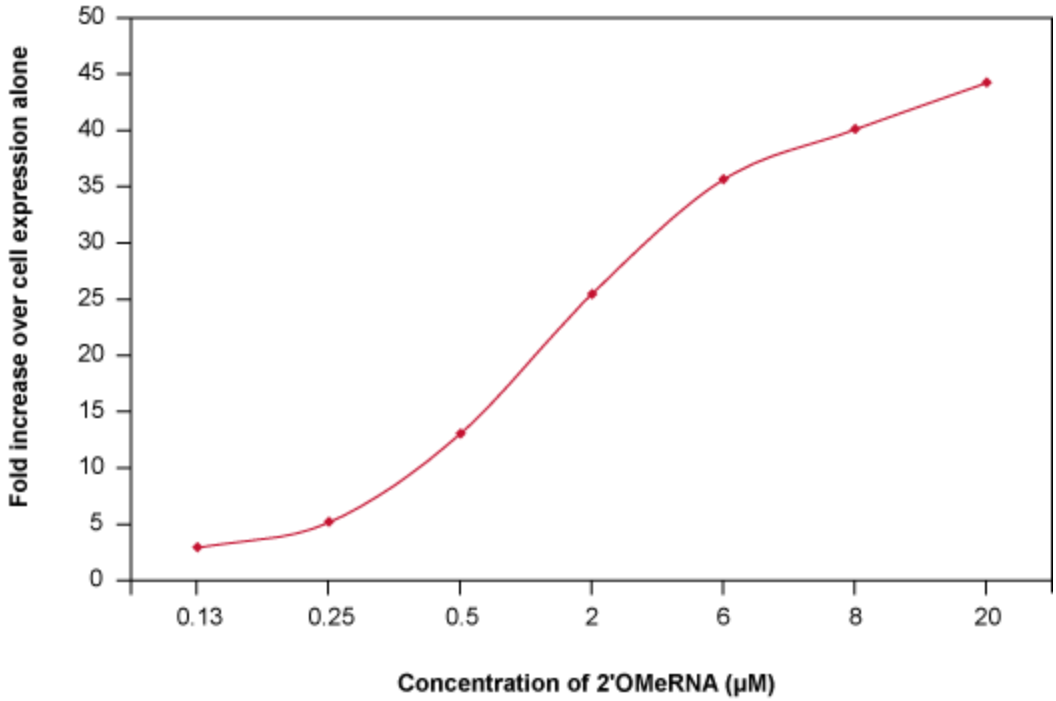
Figures and Data

*Trans*IT®-Oligo Reagent Achieves High Transfection Efficiency
*Trans*IT®-Oligo Reagent Effectively Transfects a 2'OMe RNA Oligo that Blocks a Cryptic Splice Site



***Trans*IT®-Oligo Reagent Achieves High Transfection Efficiency.** HeLa cells transfected using *Trans*IT®-Oligo Reagent and *Label* IT® Cy®3 and *Label* IT® Fluorescein labeled phosphothioate DNA oligos in complete media for 24 hours.



***Trans*IT®-Oligo Reagent Effectively Transfects a 2'OMe RNA Oligo that Blocks a Cryptic Splice Site.** The HeLa-Luc 705 reporter cell line (Kang *et al.* 1998, 37:6235) used in this study contains a luciferase reporter construct that has the ß-globin 705 intron inserted into the luciferase ORF. A mutation present at position 705 of the ß-globin intron activates two cryptic splice sites within the intron that lead to the production of a spliced luciferase mRNA that is disrupted by a small intron with an in-frame stop codon, thus preventing translation of functional luciferase protein. The transfection of a 2'OMe oligonucleotide (TriLink BioTechnologies, Inc.) complementary to the cryptic 705 splice site inhibits splicing at the cryptic splice sites enabling the complete removal of the ß-globin intron and production of a mRNA with a complete, uninterrupted luciferase ORF.

The HeLa-Luc 705 cell line was transfected with increasing amounts of the anti-705 splice site 2'OMe RNA oligo at the indicated final concentrations using the *Trans*IT®-Oligo Transfection Reagent. The cells were harvested 24 hours post-transfection and assayed for luciferase activity. The increase in luciferase activity indicates effective delivery of the anti-705 splice site RNA oligo using the *Trans*IT®-Oligo Reagent.