

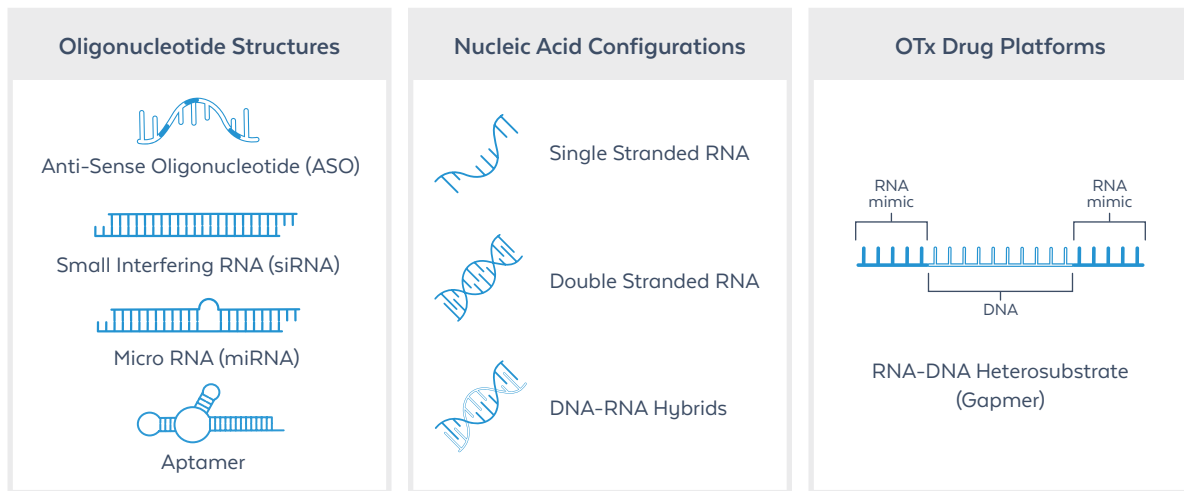
ModDetect™ Panels

Detect nucleic acid modifications independent of sequence or location

The first-of-its-kind specialty reagent panels designed to streamline development of oligonucleotide therapeutics, mRNA vaccines, and more.

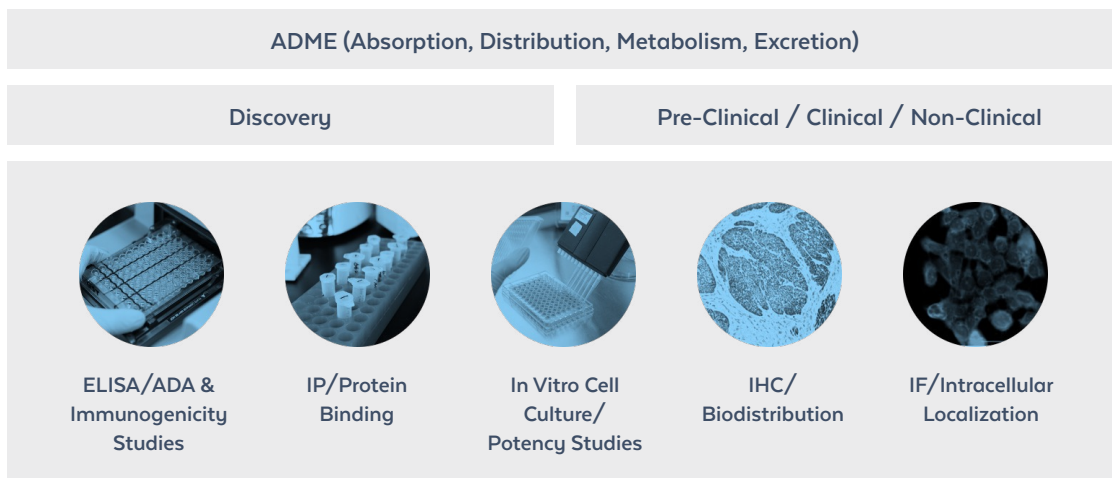
Targeted RNA Therapeutic Modalities

ModDetect panels are designed to facilitate the detection of specific chemical modifications independent of the sequence or location of the modification and can be used to evaluate a variety of RNA Tx modalities and nucleic acid structures.



ModDetect™ Panels as Analytical Tools

The ModDetect panels serve as analytical tools against different types of nucleic acid targets including modified backbones and 2'-O ribose moieties. Our in-house development ensures supply chain security and respect of client confidentiality and intellectual property.



ModDetect™ PS Panel Results

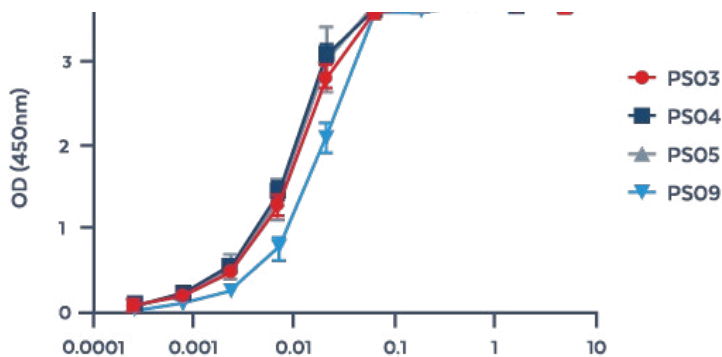


Figure 1. ELISA of a subset of PS specialty reagents reactive with an FDA-approved gapmer. Streptavidin-coated plates were coated in duplicate with 5 pmol/well of 5'Biotin-MOE-PS Gapmer. The starting dilution was 5 µg/mL and the X-axis represents the Log₁₀ of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC₅₀ is defined as the titer. PS03 IC₅₀: 11 ng/mL [●], PS04 IC₅₀: 9 ng/mL [■], PS05 IC₅₀: 10 ng/mL [▲], PS09 IC₅₀: 18 ng/mL [▼]. Assay performed using Rabbit Anti-Mouse IgG HRP conjugated (#610-403-C46) at 1:8,000 and TMB substrate (#TMBE-1000).

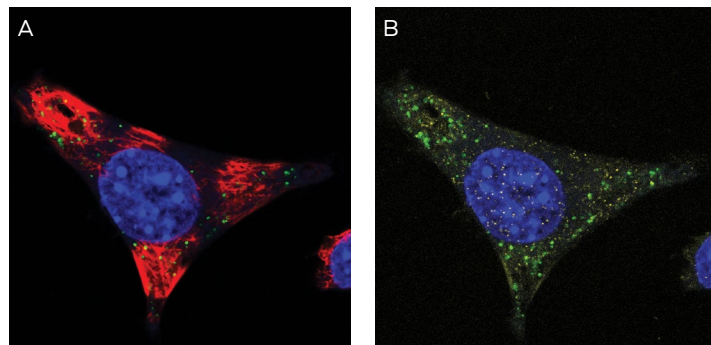
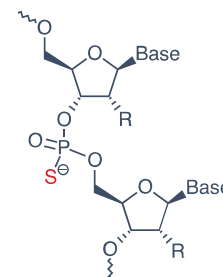


Figure 2A-B. IF of ModDetect Reagent PS05. Mouse glioma cells derived from C57 black mice were cultured and treated with Oligo Tx drug. After fixation with paraformaldehyde, cells were stained with alpha tubulin (red) and ModDetect reagent PS05 (green). Reagent PS05 was used at a 1:2000 dilution. Punctate cytoplasmic staining is consistent with endosomal storage of ASO within the cell, as expected for this Oligo Tx drug. Vehicle only treated cells showed no staining (not shown).

About the ModDetect™ Phosphorothioate (PS) Panel

- Includes (5) reagents reactive to phosphorothioate to test and select based on performance with client drug
- Designed for use in various immunoassays, such as ELISA, IF, and IHC
- Includes (3) secondary antibodies
- Unconjugated and biotin-conjugated panels available



Low on time or resources? Our team can perform *in-vitro* assay evaluation studies using our ModDetect panels to determine the best reagent for detecting your oligonucleotide candidates.



Time Saving

Save 9-12 months in drug development with faster candidate triage



Less Risk

Several uniquely-specific reagents are provided for multiple immunoassays



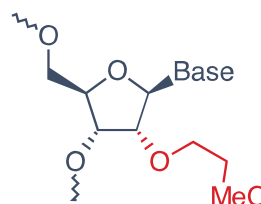
Cost Saving

Eliminate the need for custom antibody development

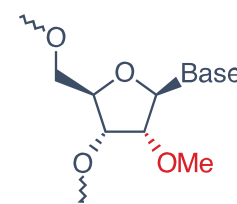
ModDetect™ Early Access Program

2'-O-Methoxyethyl (MOE) is now available for early access, and 2'-O-Methyl (OMe) is coming soon.

Ask us about our early access program!



Methoxyethyl (MOE)



2'-O-Methyl (OMe)