

## Datasheet for 200-310-NF8S

**ModDetect® 2'-O-Methyl (2'OMe) CY5 Clone OME04****Overview**

<b>Description:</b>	ModDetect® 2'-O-Methyl (2'OMe) CY5 Clone OME04 - 200-310-NF8S
<b>Item No.:</b>	200-310-NF8S
<b>Size:</b>	25 µL
<b>Applications:</b>	Dot Blot
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	Current studies focusing on RNA therapeutics use as potential drugs antisense oligonucleotides (ASO), short interfering RNA (siRNA), and micro RNA (miRNA). The choice of oligonucleotide chosen for a specific treatment is dependent on many factors. However, all oligo therapeutics must be modified in some manner, as unmodified nucleotides are difficult to identify and are highly susceptible to degradation by endogenous nucleases. Modifications can be created within the sugar-phosphate backbone (first generation), the ribose sugar (second and third generation), or at multiple locations (third generation). Antibodies to modified oligonucleotides are useful for basic immunoassays including, ELISA, IHC, and IF. In addition, several types of toxicology assays (immunogenicity assays), such as antibody-drug assays (ADA) or other pharmacokinetic (PK) and pharmacodynamic (PD) studies require oligonucleotide antibodies as analytical tools for general research and preclinical trial experiments. Antibodies to an oligonucleotide therapeutic allow researchers to assess cellular uptake, tissue distribution, and can serve as a positive control for immunogenicity studies.
<b>Synonyms:</b>	2'-O-Methyl, 2'OMe, ASO, anti-sense oligonucleotide, siRNA, RNA therapeutic, gapmer, aptamer, CY5 Conjugated Anti-2'-O-Methyl (2'OMe), 2'-O-Methyl Cy5 Conjugated, Cyanine 5
<b>Host Species:</b>	Mouse
<b>Conjugate:</b>	Cy5™
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	OME04
<b>Format:</b>	IgG1
<b>F/P Ratio:</b>	4.6

## Target Details

<b>Immunogen Type:</b>	Other
<b>Immunogen:</b>	ModDetect® 2'-O-Methyl (2'OMe) Clone OME04 was prepared from cell culture supernatant produced by repeated immunizations with a proprietary oligo sequence.
<b>Purity/Specificity:</b>	This Protein A purified ModDetect® 2'-O-Methyl (2'OMe) Clone OME04 is directed against 2'OMe modified ribose sugar. This product was Protein A purified from monospecific supernatant and conjugated to Cy5.

## Application Details

<b>Tested Applications:</b>	Dot Blot
<b>Application Note:</b>	ModDetect® 2'-O-Methyl (2'OMe) Cy5 Clone OME04 has been validated by dot blot. In antigen-down or immunometric ELISAs, the ModDetect® 2'-O-Methyl (2'OMe) Cy5 Clone OME04 preferentially detects 2'OMe modified ribose sugar groups over native deoxyribose or ribose sugars. It is also likely to be functional in IF and IHC assays, however, its sensitivity, specificity, and conditions for optimal use in these assays has not yet been determined. All assays should be optimized by the user.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.07 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C or below prior to opening. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

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