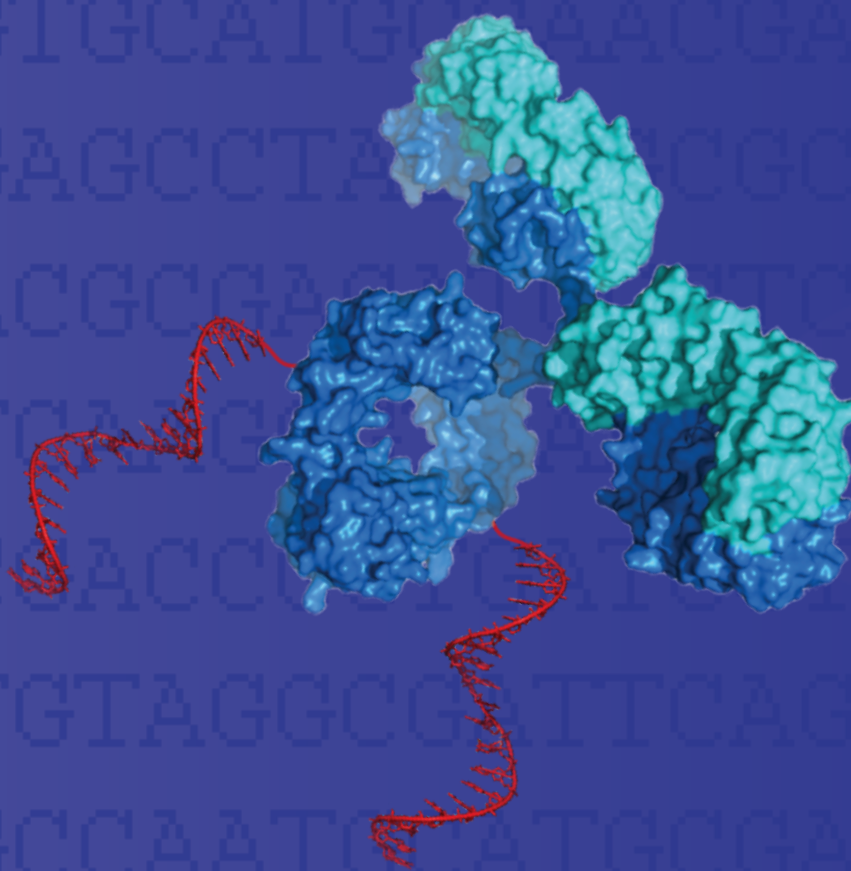


Simple, Fast, Site-Specific.

oYo-Link® Oligo Custom

Antibody-Oligo Labeling Technology



How it works

Page 2

Why oYo-Link?

Page 3

Data

Pages 4-5

Pricing & Ordering

Page 6

oYo-Link® Oligo Custom

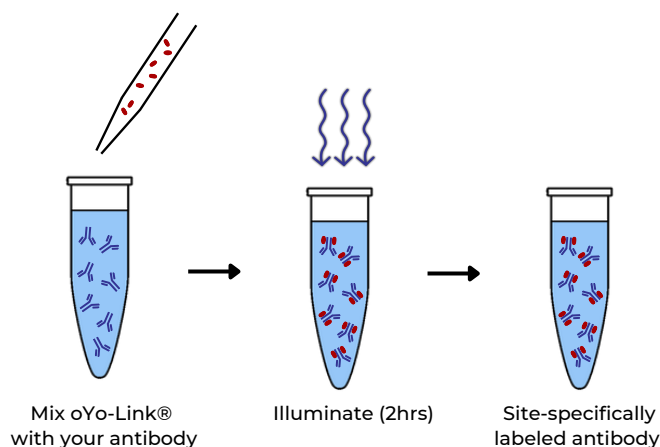
Simple, Fast, & Site-Specific Antibody-Oligo Labeling

oYo-Link® Oligo Custom makes labeling antibodies with oligonucleotides easy. Site specific, covalent labeling is possible with only 30 seconds hands-on time.

Rapid labeling < 30s hands-on

Labeling requires just two steps:

- 1 Mix oYo-Link with your antibody
- 2 Illuminate with the non-damaging 365nm UV light for < 2 hours



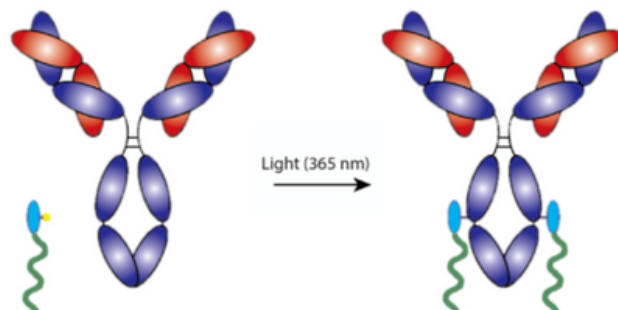
oYo-Link® Oligo Custom enables efficient labeling of compatible antibodies with both ssDNA & dsDNA oligonucleotides, up to 80bp or longer.

Antibody labeling is limited to the Fc region and is highly efficient, assuring there are 1 to 2 oligonucleotides per antibody, yielding a homogenous mixture of antibody-oligo conjugates.

This allows for more control and precision over your experiments, removing any impact of decreased assay performance associated with traditional heterogeneous oligonucleotide labeling products.

All oligonucleotides are HPLC or PAGE grade, ensuring confidence in downstream assays. Just provide us with your sequence and we'll send the custom oYo-Link® reagent with your oligo attached.

To perform the conjugation, all you'll need is the oYo-Link® reagent and an [LED photo-crosslinking device](#).



Superior antibody-oligo labeling

A comparison of oYo-Link® Oligo with other commercially available conjugation technologies

Feature	oYo-Link® Oligo Custom	Other conjugation kits & technologies
Hands-on	2 steps: mix & illuminate, 30s hands-on	10 or more steps
Total time	2 hours total	Ranges from 30mins to 4 hours
Minimum antibody quantity	Label as little as 1µg	Ranges from 25ug to 100ug
Control over reaction	Site specific: labeling of antibody Fc region only, so no interference with antibody binding site. 1 – 2 oligos per antibody	No control of where oligo will bind, possible interference with antibody binding site
ssDNA & dsDNA labeling	ssDNA & dsDNA up to 80bp or more	ssDNA of 10–120bp and must contain terminal amine group. dsDNA up to 80 bp
Minimum antibody concentration	0.05 mg/mL	0.5 mg/ml
Number of kit components	1 vial oYo-Link®-Oligo reagent ready for conjugation with your antibody*	8+ reagents/components
Buffer compatibility	Compatible with all common buffers including BSA, Tris & Azide. No purification required	Must be in an amine free buffer. NO Sodium Azide, BSA, Tris, gelatin. Purification required
Multiple usage	Store any unused oligo-oYo-Link® for use at a later date	All kit reagents must be used in each reaction

*oYo-Link reactions require an LED Crosslinking device which you can purchase on the AlphaThera website [here](#). Alternatively see compatible devices [here](#).

Antibody Crosslinking Data

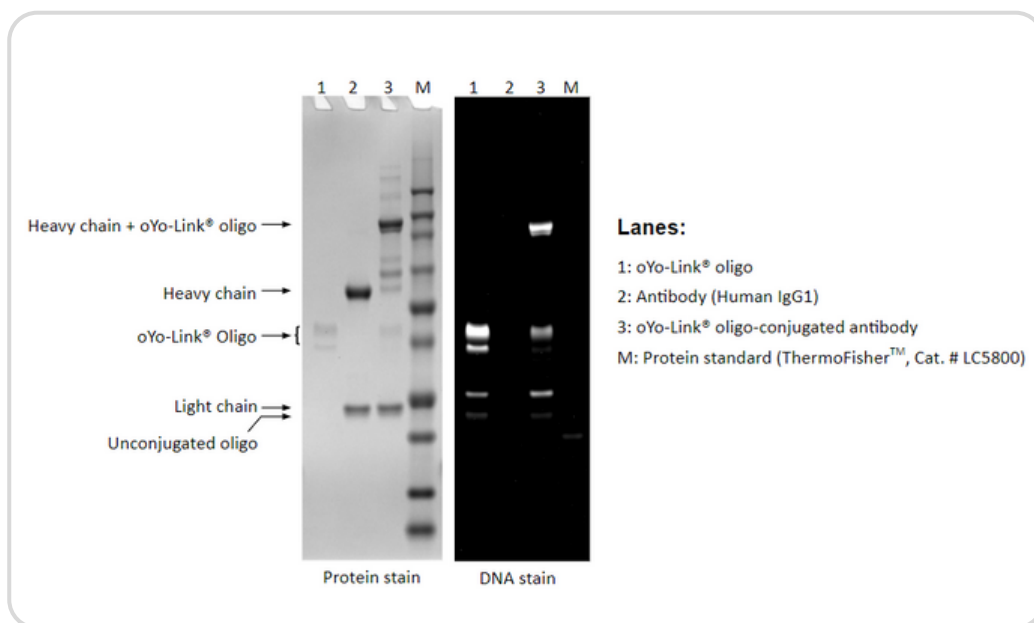


Fig. 1A. Conjugation efficiency

1 μ L of the oYo-Link® Oligo reagent was mixed with 1 μ g of antibody (human IgG1) and photo-crosslinked under 365nm UV for 2hrs. Samples were reduced and run on a 4-12% Bis-Tris denaturing gel. Following site-specific photo-crosslinking of the antibody's heavy chain with oYo-Link Oligo, an upward shift of the antibody heavy chain was observed. This demonstrates over 90% conjugation efficiency of oYo-Link Oligo to the antibody.

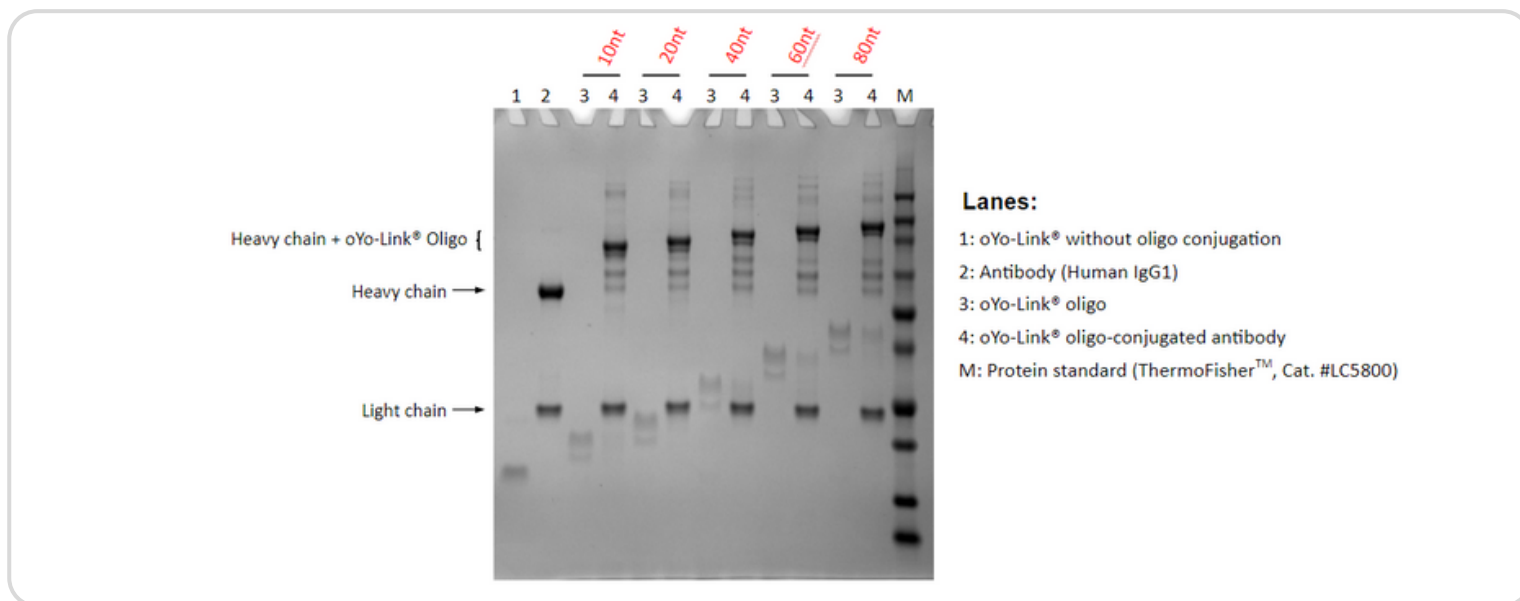


Fig. 1B. Crosslinking data for oligos of varying length & sequence

oYo-Link allows efficient oligo-antibody conjugation using custom oligos with different sequences and lengths: 1 μ L each of the oYo-Link Oligo reagents was mixed with 1 μ g of antibody (human IgG1) respectively and photo-crosslinked under 365nm UV for 2hrs. Each of the five oligos has a different sequence and a different length, varying from 10nt to 80nt. Samples were reduced and run on a 4-12% Bis-Tris denaturing gel. Following site-specific photo-crosslinking of the antibody's heavy chain with oYo-Link Oligo, an upward shift of the antibody heavy chain was observed. The figure above demonstrates over 90% conjugation efficiency of oYo-Link Oligo to the antibody. There was no significant conjugation efficiency difference observed among oligos with different sequences and lengths.

Cell Binding Assay Data

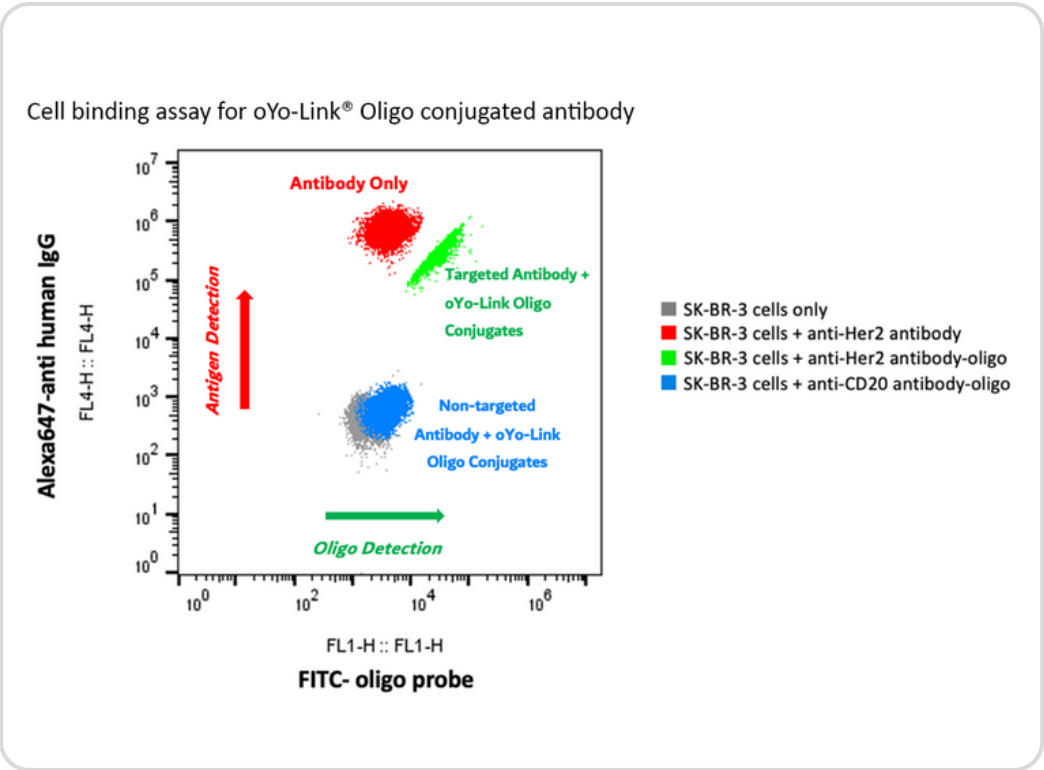


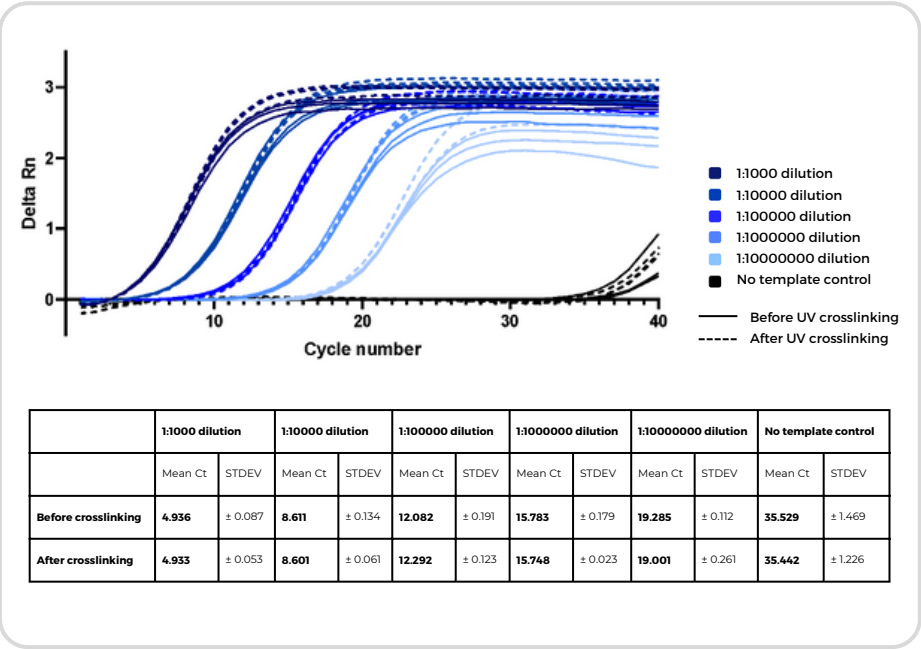
Fig. 2. Cell Binding Assay data

Successful binding of the oYo-Link® Oligo - Antibody conjugates to the target cells (Her2-overexpressed SK-BR-3 cells) is demonstrated by the green cluster, which shifts along both the y and x axes. An increase in FITC-labeled oligo probe for FACS analysis (x-axis) indicates Oligo presence, while an increase in Alexa647-labeled secondary antibody signal (y-axis) indicates successful anti-Her2 antibody binding. The green cluster proves that oYo-Link anti-Her2 antibody's specificity to the target cells is preserved while the conjugated Oligos can be simultaneously detected. Human anti-CD20 antibody conjugated with oligo was used as a negative control.

PCR amplification data

Fig. 3. UV (365nm) crosslinking does not affect PCR amplification of oYo-Link Oligo.

oYo-Link® Oligo before and after UV (365nm) crosslinking to Cetuximab was used as template for Real-time PCR amplification. Starting with 16.5 µM of oYo-Link Oligo, before or after UV crosslinking, the template was diluted 1:1000 through 1:10,000,000-fold. SYBR Green was used to detect amplification products, and baseline-subtracted, normalized signal is plotted on the y-axis (Delta Rn). A no template control was also included for the Real-time qPCR assay. No significant difference is observed between cycle threshold (Ct) values for oYo-Link Oligo before and after UV crosslinking. Therefore, 365nm UV crosslinking has very minimal effects on the oYo-Link Oligo for downstream PCR-based applications.



Submit your sequence, we deliver ready for labeling

1

Submit your sequence



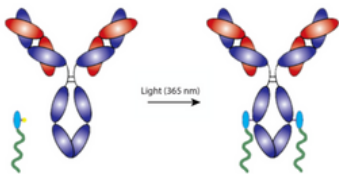
2

We produce oYo-Link with your oligo attached



3

You crosslink to your antibody



Please note the price of your oligo is included in the price below.
All Oligonucleotides are HPLC or PAGE grade, ensuring confidence in downstream assays.
Pricing below is for oligos with length between 10-80bp. For oligos of length > than 80bp, request a custom quote.

Catalog #	Price	Amount Labeled
AT1002-25ss	\$450	25 µg ssDNA (1 Custom Sequence)
AT1002-25ds	\$600	25 µg dsDNA (1 Custom Sequence)
AT1002-100ss	\$1000	100 µg ssDNA (1 Custom Sequence)
AT1002-100ds	\$1200	100 µg dsDNA (1 Custom Sequence)

AT1002-mIgG1 is for labeling mouse IgG1 antibody. Pricing is the same as above for ssDNA/dsDNA oligos to label 25ug or 100ug of antibody

20% Discount off your first order* with code:

ATDNA20

*Discount can only be applied once per customer. Maximum value of \$750. Discount not applied to shipping costs.



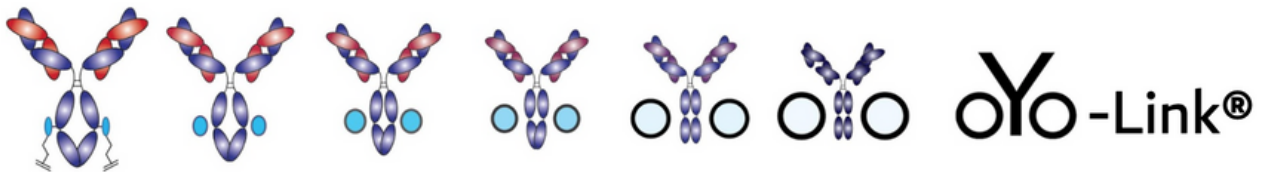
Click [here](#) or scan the QR code to order.



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