

Applications

DNA repair & recombination

PARP1, APE1, XRCC1, Pol β , FEN1, LIG1/LIG3, EXO1, DNA2, MRE11–RAD50–NBS1, RPA, RAD51, RAD52, BRCA2, RAD54, ATR–ATRIP, 9-1-1

Transcription & chromatin

RNA polymerase tracking, transcription factors, nucleosome positioning, chromatin remodelers

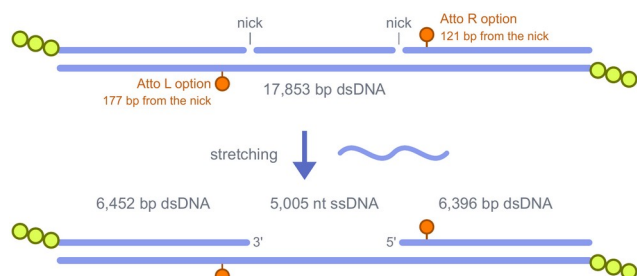
Replication & helicases

RFC, PCNA, Pol δ , Pol ϵ , CMG complex, BLM, WRN, UvrD, PIF1

Structure & folding

DNA/RNA hairpins, G-quadruplexes, FRET, protein folding, multi-fragment binding-affinity comparison

ssDNA Gap construct



17.9 kb DNA with two nicks 5 kb apart. Stretch it to open a 5 kb ssDNA gap between two dsDNA arms.

One Atto dye marks the gap junction: **L = 3' end** or **R = 5' end**.

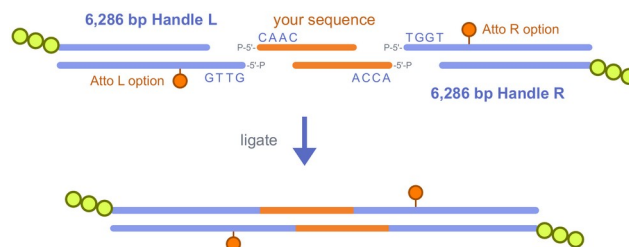
Fluorophore: L – Atto647N • R – Atto565, **both in stock**

Other dye? [Ask for your fluorophore of choice →](#)

Per vial: 20 C-Trap runs

\$450

6.3 kb Handles for dsDNA



Two biotinylated handles. Ligate any dsDNA insert between them (Golden Gate compatible).

An optional Atto dye on Handle L or R (7 bp from the overhang) marks the tether direction.

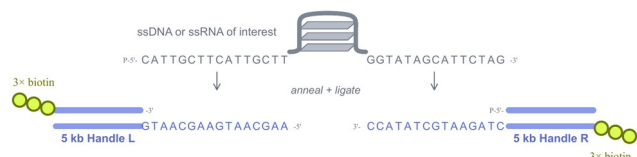
Fluorophore: no dye • L – Atto647N • R – Atto565, **all in stock**

Other dye? [Ask for your fluorophore of choice →](#)

Per vial: 8 reactions (up to 40 C-Trap runs)

\$350 no dye • \$390 with dye

5 kb Handles for ssDNA/ssRNA



Handles with long overhangs. Anneal and ligate your ssDNA or RNA oligo.

Fluorophore: no dye, **in stock**

Need a dye? [Ask for your fluorophore of choice →](#)

Per vial: 8 reactions (up to 40 C-Trap runs)

\$390

Our first release

These constructs are the start of a growing catalogue, and we are building it with you.

Don't see your experiment?

Protein folding, DNA curtains, multi-fragment tethers, other lengths or labels: we design the construct with you.

Get in touch →

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Product details

Specifications

	ssDNA Gap	6.3 kb Handles	5 kb Handles
Length	17,853 bp	6,286 bp each	5,043 bp and 5,039 bp
Structure	5,005 nt gap (bp 6,453–11,457) between 6,452 bp and 6,396 bp dsDNA arms	2 handles, your dsDNA insert ligated between	2 handles, your ssDNA/RNA oligo annealed and ligated between
End labels	3× biotin at each end	3× biotin, outer end of each handle	3× biotin, outer end of each handle
Dye position	L: 177 bp before the gap (bottom strand). R: 121 bp past the gap (top strand)	Handle L or R, 7 bp from the overhang	—
Per vial	20 C-Trap runs	8 reactions (up to 40 C-Trap runs)	8 reactions (up to 40 C-Trap runs)
Storage	+4 °C, protect from light	-20 °C, protect from light (dye versions)	-20 °C
Price	\$450	\$350 no dye · \$390 with dye	\$390

Fluorophores: Atto647N Ex/Em 646/664 nm · Atto565 Ex/Em 563/592 nm

1 C-Trap run = one 500 µl dilution in channel 2, enough to run one experiment on the C-Trap.

Why SMeasy

Single-molecule biophysics is moving from simple model systems to complex, multi-protein mechanisms. We handle the DNA engineering, so your lab skips weeks of construct troubleshooting and goes straight to the experiment: DNA repair, replication, chromatin and transcription.

Custom constructs

Different fluorophore, length, label or geometry: send us the experiment you want to run and we will scope the construct with you.

Ordering

Order at smeasybio.com or request a quote from msimonetta@smeasybio.com

Shipping: \$25 USA · \$40 Europe. Prices in USD.