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# Fusion BioLabs DNA Aptamer Development Kit (Capture-SELEX module)

**SKU# DAL-02:** DNA Aptamer Development Kit (Capture-SELEX module)

## Product Overview

Fusion BioLabs offers a fully validated DNA Aptamer Development Kit (Capture-SELEX module) for your own DNA aptamer development. This kit is a fully validated DNA aptamer development kit, includes all of the reagents up to SELEX procedures using Fusion BioLabs developed capture-SELEX platform.

- ssDNA library oligos and primers for your primary library construction and secondary library construction for the iterative SELEX up to 15 rounds.
- Target-bound and unbound ssDNA aptamer pool partition using streptavidin magnetic beads.
- Counter and/or negative bound ssDNA aptamer pool removal using streptavidin magnetic beads.
- PCR master mix for dsDNA amplification and purification.
- ssDNA aptamer pool preparation using lambda exonuclease digestion.
- ssDNA aptamer pool purification using quick and simple column-based technology.

The DNA Aptamer Development Kit (Capture-SELEX module) is fully optimized for one Capture-SELEX project (enough for 16 rounds of SELEX) to get your DNA aptamer candidates within 4 weeks.

## Kit contents

The following components are included in the Kit.

Component	Quantity
Vial 1: ssDNA Library Oligos	20 $\mu$ l, 100 $\mu$ M
Vial 2: 5'-Biotinylated Capture Oligos	60 $\mu$ l, 100 $\mu$ M
Vial 3: Forward Primer	20 $\mu$ l, 100 $\mu$ M
Vial 4: 5'-FAM Labeled Forward Primer	20 $\mu$ l, 100 $\mu$ M
Vial 5: Reverse Primer	20 $\mu$ l, 100 $\mu$ M
Vial 6: 5'-Phosphorylated Reverse Primer	20 $\mu$ l, 100 $\mu$ M
Vial 7: Streptavidin-Coated Magnetic Beads	3.0 ml
Vial 8: Lambda Exonuclease Reaction Buffer (10X)	100 $\mu$ l



Vial 9: Lambda Exonuclease (5 units/ $\mu$ l)	20 $\mu$ l
Vial 10: ssDNA Binding Buffer	15 ml
Vial 11: ssDNA Preparation Buffer	15 ml
Vial 12: ssDNA Wash Buffer	9.0 ml
Vial 13: PCR-grade Water	1.5 ml
Vial 14: 2x PCR Master Mix	3.0 ml
<b>ssDNA Cleanup Column I</b>	30 columns
<b>ssDNA Cleanup Column II</b>	30 columns
Collection Tubes	60 tubes
Nuclease-free Tubes	30 tubes

- Store at  $-20^{\circ}$ ; reagents are guaranteed stable for 12 months when properly stored.

### Kit Usage

- Primary ssDNA library construction for 1st round SELEX.
- Secondary ssDNA library construction for the iterative SELEX.
- A fully validated development kit utilizing capture-SELEX platform is available for both small and large molecular targets.