

Fusion BioLabs DNA Aptamer Library Kit

SKU# DAL-01: DNA Aptamer Library Kit

Product Overview

Fusion BioLabs offers a validated **DNA Aptamer Library Kit** for your own DNA aptamer development. This kit has enough ssDNA library oligos and primers for your primary library construction for 1st round SELEX, and secondary library construction for the iterative SELEX of 2-4 independent DNA aptamer development projects depends on your SELEX strategies. With customizable features and robust performance, our DNA Aptamer Library Kit is designed for omitting your library construction optimization and thus facilitating your DNA aptamer development.

Key Features

- **High Efficiency:** Library and primer oligos designed for specific and efficient amplification of DNA library for [DNA aptamer SELEX](#) using either [Capture SELEX platform](#) or traditional magnetic bead-based SELEX platform.
- **Flexibility and versatility:** For single-stranded DNA (ssDNA) generation, the kit could be used either
 - 1) Upgrading SELEX technology by using lambda exonuclease digestion or
 - 2) Regular strand separation with streptavidin-coated magnetic beads and alkaline denaturation.

Kit contents

The following components are included in the Kit.

Component	Quantity
Vial 1: ssDNA Library Oligos	30 μ l, 100 μ M
Vial 2: Forward Primer	30 μ l, 100 μ M
Vial 3: 5'-FAM Labeled Forward Primer	30 μ l, 100 μ M
Vial 4: Reverse Primer	30 μ l, 100 μ M
Vial 5: 5'-Phosphorylated Reverse Primer	30 μ l, 100 μ M
Vial 6: 5'-biotinylated reverse primer	30 μ l, 100 μ M

- Store at -20°; reagents are guaranteed stable for 12 months when properly stored.

ssDNA library pool Structure

F₁₉ (19 bp Forward primer) + **N**₆₂ (62 bp random sequence) + **R**₁₉ (19 bp Reverse primer)

Kit Usage



- Primary library construction for 1st round SELEX.
- Secondary library construction for the iterative SELEX.

Flowchart of magnetic beads based-SELEX technology to find the candidate DNA aptamer.

