APD-06 | Rabbit scFv Phage Display Library Construction Kit

pAPD-rbt-scFv | Product Data Sheet

Product Overview

pAPD-rbt-scFv is a phagemid vector for constructing rabbit single-chain variable fragment (scFv) phage display libraries. Rabbit VH, Vκ, and Vλ variable-region repertoires are amplified from cDNA derived from peripheral blood lymphocytes or lymphoid tissues of immunized or non-immunized donors. VH and VL repertoires are assembled by overlap-extension PCR, digested using either validated cloning method, and ligated into the correspondingly digested pAPD-rbt-scFv vector.

Library Construction Workflow

1. Amplify rabbit VH, Vκ, and Vλ repertoires using the supplied primer mixes.
2. Assemble rabbit κ-scFv and λ-scFv repertoires by overlap-extension PCR.
3. Digest the scFv repertoires and pAPD-rbt-scFv vector using either Method A (SacI/SpeI) or Method B (SfiI).
4. Purify the appropriate insert and backbone fragments, ligate, and transform to generate rabbit scFv libraries.

Key Features

Efficient phage display: Designed for expression and display of rabbit scFv fragments for library screening and selection.

Flexible cloning: Supports validated SacI/SpeI and SfiI restriction-digestion strategies.

Versatile vector: Supports phage library construction and downstream antibody fragment expression.

Specifications

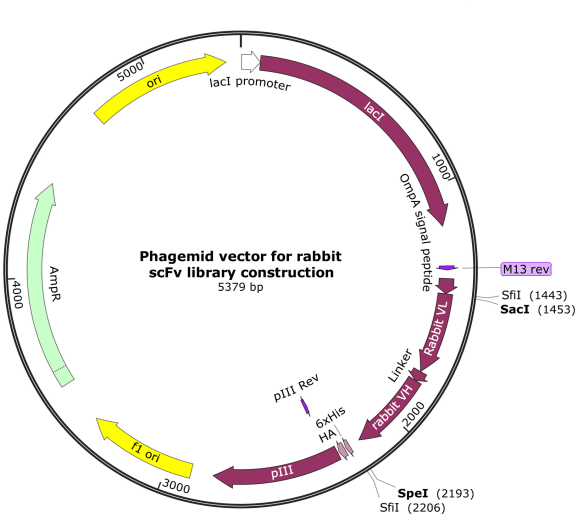
Specification	Description
Catalog number	APD-06
Antibiotic resistance	Ampicillin (AmpR)
Expression system	Inducible for downstream expression
Delivery type	Transformation
Product type	Bacterial expression / phage display vector
Cloning method	Restriction enzyme cloning: Method A (SacI/SpeI) or Method B (SfiI)

Kit Contents & Storage

Vial	Quantity	Description
1	100 µL, 10 µM	Primer mix (F+R) for rabbit Vκ repertoire amplification
2	100 µL, 10 µM	Primer mix (F+R) for rabbit Vλ repertoire amplification
3	100 µL, 10 µM	Primer mix (F+R) for rabbit VH repertoire amplification
4	100 µL, 10 µM	Assembly primers (F+R) for scFv repertoire construction
5	10.0 µg	pAPD-rbt-scFv plasmid in Tris-EDTA buffer
6	100 µL, 10 µM	Forward sequencing primer for rabbit scFv insert (M13 Reverse)
7	100 µL, 10 µM	Reverse sequencing primer for rabbit scFv insert (pIII Reverse)

Store at -20°C. Primer sets and vector are guaranteed stable for 12 months when properly stored.

pAPD-rbt-scFv Vector Map (5,379 bp)



The restriction sites shown in the vector map include SfiI and SacI/SpeI cloning sites.