APD-07 | Chicken scFv Phage Display Library Construction Kit

Data Sheet | Version 2.0 | Modified November 8, 2026

Product Overview

The APD-07 Chicken scFv Phage Display Library Construction Kit provides amplification and assembly primers and the pAPD-ck-scFv phagemid for construction of chicken IgY-derived single-chain variable fragment (scFv) libraries. Chicken VH and VL repertoires are amplified from donor-derived cDNA, assembled in VH-(G4S)3 linker-VL format, and cloned by either validated restriction-enzyme strategy.

Key Features

Chicken IgY-derived VH and VL repertoire amplification; overlap-extension scFv assembly; alternative SacI/SpeI and SfiI cloning methods; phagemid-based display and downstream expression.

Specifications

Specification	Description
Catalog number	APD-07
Vector	pAPD-ck-scFv (5,349 bp)
Antibiotic resistance	Ampicillin (AmpR)
Expression	Inducible for downstream expression
Delivery	Transformation
Product type	Bacterial expression / phage display vector
Cloning method	Method A: SacI/SpeI; Method B: SfiI

Contents & Storage

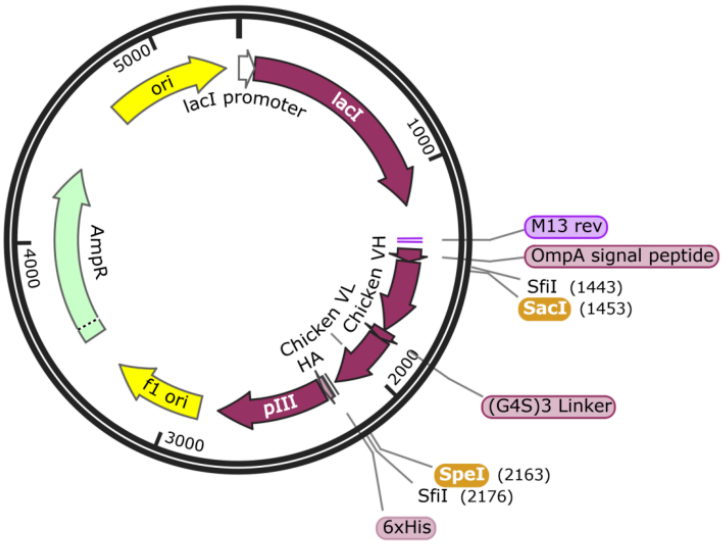
Vial	Quantity	Description
1	100 µL, 10 µM	Chicken VH repertoire amplification primer mix (F+R)
2	100 µL, 10 µM	Chicken VL repertoire amplification primer mix (F+R)
3	100 µL, 10 µM	Chicken scFv assembly primer mix (F+R)
4	100 µL, 10 µM	M13 Reverse primer for scFv forward sequencing
5	100 µL, 10 µM	pIII Reverse primer for scFv reverse sequencing
6	10.0 µg	pAPD-ck-scFv plasmid in Tris-EDTA buffer

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

Library Construction Workflow

1. Amplify chicken VH and VL repertoires using Vials 1 and 2. 2. Assemble chicken scFv using Vial 3. 3. Digest scFv insert and pAPD-ck-scFv vector using Method A (SacI/SpeI) or Method B (SfiI). 4. Gel-purify, ligate, transform, and prepare the phage display library.

Vector for Library Construction



Phagemid vector for chicken scFv library construction

5349 bp

Documentation

Refer to the APD-07 Short Protocol, Version 2.0, for PCR, overlap-extension assembly, both digestion methods, ligation, transformation, and phage library preparation.