Accelerate Your Discovery Efforts with Twist Antibody Libraries

Discover how the synthetic advantage can streamline your discovery efforts with Twist Antibody Libraries. Twist Bioscience capitalizes on its massively parallel DNA synthesis platform to generate custom antibody libraries that meet your needs. Complementing this service is the *Library of Libraries*, a collection of synthetic antibody libraries offered off-the-shelf by Twist Biopharma, a division of Twist Bioscience. Every ready-to-use library offers unique, drug-like antibodies and comes with advanced design support from Twist Biopharma. Compared to those from immunized sources, Twist Antibody Libraries are more diverse, cost-effective, and faster to obtain, making antibody discovery easier than ever before.

	TWIST CUSTOM LIBRARIES	TWIST LIBRARY OF LIBRARIES
BENEFITS	• Design fully custom libraries without unwanted bias, redundancy, or developmental liabilities • Define which binding motifs, sequences and mutations to include • Seamlessly incorporate length variation at precisely defined ratios • Avoid animal use	• Obtain precise, ready-to-use fully human libraries designed by in-house experts • Go beyond natural diversity with precisely "written" synthetic libraries that can tackle hard-to-drug targets • Eliminate unwanted bias, redundancy, and developmental liabilities • Access well-known human antibody frameworks used in approved therapeutics • Save time by avoiding upfront library designing and building • Avoid animal use
LIBRARY DIVERSITY & SPECIFICATIONS	• Libraries up to 10^{10} diversity • Incorporate diversity into multiple germlines • Multiple scaffolds: VHH, scFv, and Fab	• 15 libraries with ~10^{10} diversity each • Multiple scaffolds: VHH, scFv, and Fab • Both general naïve and target-focused libraries (GPCR, ion channel, and carbohydrate)
EXPERTISE ADVANTAGES	Fabrication experts generate libraries to your specifications	Design and fabrication experts with 50+ years of combined antibody engineering experience generate libraries that are ready for you to use
CONFIDENTIALITY & IP	You own your library	You can secure exclusivity and IP on antibody sequences from the libraries via a firewalled gatekeeping process that maintains your confidentiality
LIBRARY INPUT & OPTIMIZATION	You define the library composition, including variant ratios or specific variant sequences, number of mutations, and mutation sites, with input from rational design, Ala/His scans, or other knowledge	Use these libraries off-the-shelf; Twist expertly designs libraries that contain antibodies with optimal affinity, expression, immunogenicity, solubility, druggability, and processability
TURN-AROUND TIME	• Linear combinatorial library fabrication: starting at 4 weeks • Linear combinatorial library fabrication with cloning: starting at 12 weeks	Delivery of ready-to-screen library: 1 week
APPLICATIONS	• Therapeutic Antibodies • Diagnostic Antibodies • Reagent Antibodies • Protein Engineering • Drug Discovery	• Therapeutic Antibodies • Diagnostic Antibodies • Reagent Antibodies • Chimeric Antigen Receptors (CARs) • Drug Discovery
PRODUCTS	• Site Saturation Variant Libraries • Combinatorial Variant Libraries • Spread-Out Low Diversity (SOLD) Libraries	**VHH Libraries** VHH Ratio, VHH Shuffle, VHH hShuffle, VHH hShuffle HI **Fab Libraries** Hyperimmune Original Fab, Hyperimmune Common Light Chain Fab **scFv Libraries** Structural scFv, Ancestral scFv, AI Hypermutated scFv, Minotaur scFv **Target-Focused Libraries** GPCR 2.0 scFv, GPCR 3.0 scFv, VHH hShuffle GPCR, Ion Channel scFv, Carbohydrate scFv