

Evercode™ BCR Single Cell Immune Profiling

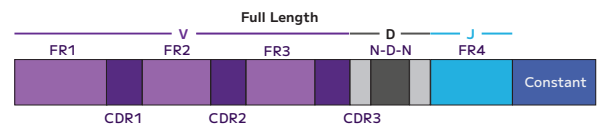
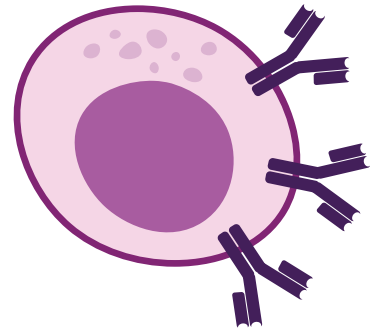
B Cell Receptor + Whole Transcriptome
Up to 1 Million Cells

Unmatched Scale
Uncover BCR Diversity
Sensitive Detection

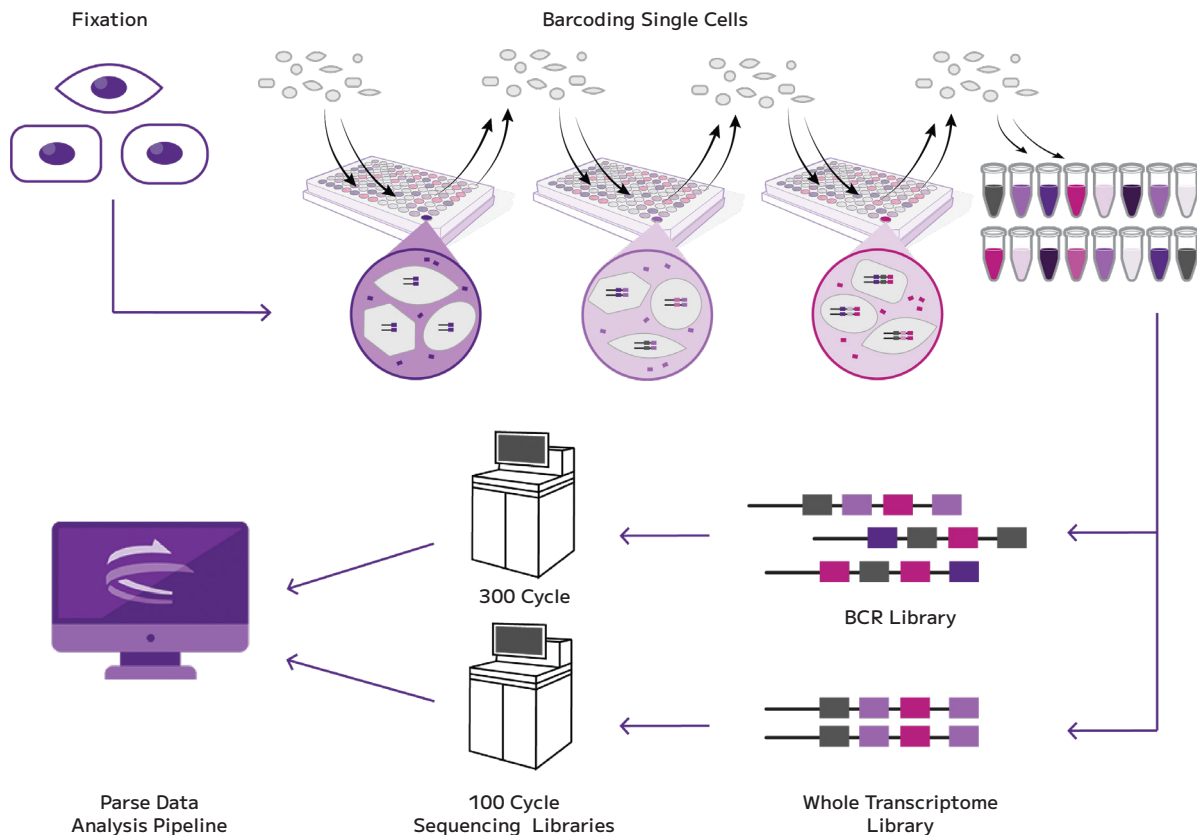


B Cell Receptor (BCR) Profiling

B cells play a central role in the adaptive immune system. The B Cell Receptor (BCR) is a protein complex that enables recognition and response to an enormous breadth of antigens resulting in the production of antibodies. Each BCR is composed of two chains, the heavy and the light chain, that combine to form a unique BCR pair. Each chain comprises multiple isotypes where seven heavy and two light chain isotypes further the complexity of the BCR repertoire. Furthermore, recombination of the variable (V), the diversity (D), and the joining (J) gene segments and the insertion of random nucleotides at junctions results in the vast antibody repertoire.



The Evercode BCR Profiling Solution



Evercode BCR

BCR diversity meets cell identity

Connect BCR repertoire and cell type identity for deeper insights into cellular context and functional relevance, even in rare populations.

Unrivalled paired-chain resolution

Detect full-length, natively-paired immunoglobulin heavy and light chain sequences for a complete view of the BCR repertoire.

Cross-species compatible

Broad model compatibility supports human, mouse, and humanized transgenic mouse research to bridge basic and preclinical applications.

Scalable and flexible

The only instrument-free, fixed-sample BCR profiling assay streamlines processing with the flexibility for any size lab or collaboration.

Applications of Evercode BCR

Explore a wide variety of immunological applications through Evercode BCR, which is capable of mapping paired BCR sequences in up to 1 million B cells together with their whole transcriptome profile.

HIGH-THROUGHPUT BCR SCREENING

Large-scale experiments uncover the diversity and dynamics of BCR repertoires in health and disease

ANALYZE AND MONITOR CLONOTYPES

Detect and track clonally-related B cell populations across time, tissue, and disease state

ADVANCE ANTIBODY DISCOVERY

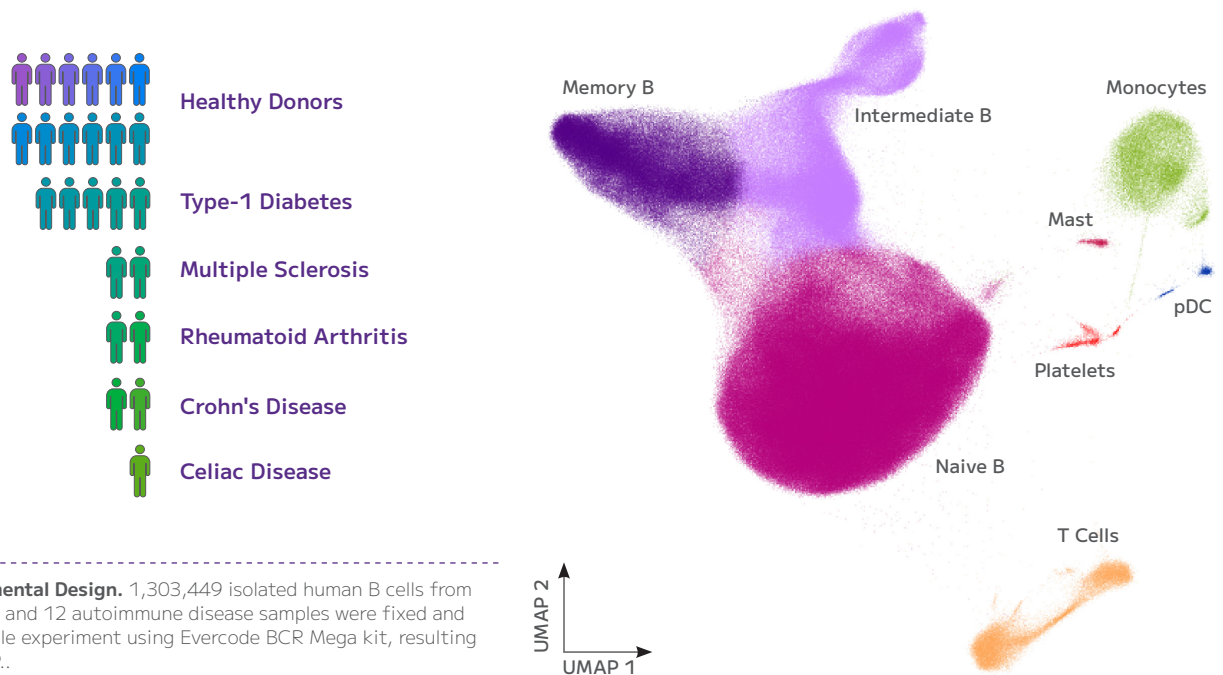
Maximize hit generation from every campaign from model optimization to identification of target candidates

UNCOVER THE IMMUNE RESPONSE

From infectious disease to immunization and immunotherapy, Evercode BCR is your partner in BCR discovery.

1 Million Cell Profiling Simplified

High throughput capabilities capture the full diversity of the immune repertoire. Evercode BCR simultaneously profiled >1 million isolated human B cells from healthy and autoimmune diseased donors.



Combined BCR & Gene Expression Profiling from 24 samples

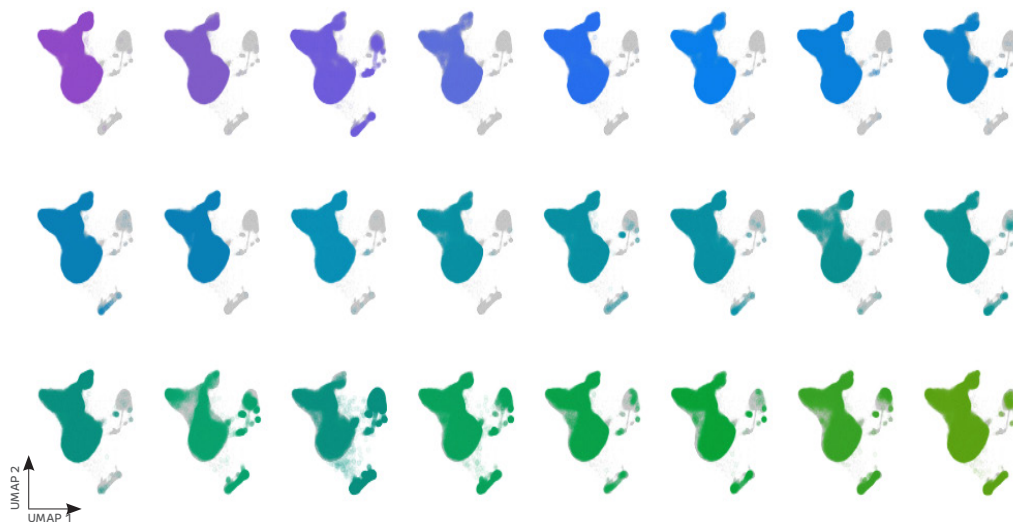


Figure 2: Distribution of 24 samples across the UMAP, colored by donor. 1,303,449 isolated human B cells were clustered for each sample.

Sensitive Clonotype Detection

Revealing the complexity of the immune repertoire requires sensitive detection of BCRs along with whole transcriptome profiles. Across all samples, Evercode BCR captured nearly 1 million paired CDR3s.

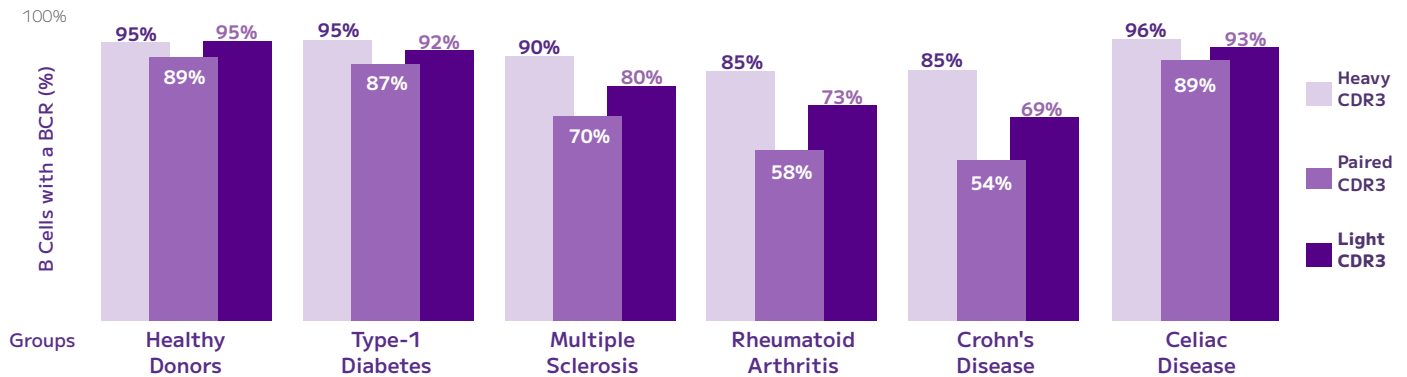


Figure 3: BCR Chain Detection Across Six Sample Groups. High rates of chain assignments across the sample groups. Paired CDR3 detection varied between 54-89%.

1 experiment. >900,000 Unique Clonotypes.

The Evercode BCR kit generates the most comprehensive immune repertoire detection from a single experiment to date. Over 900,000 unique paired clonotypes were identified across the 24 donors with the vast majority being classified as unique (<2) clonotypes. A clonotype was defined as an exact paired CDR3 sequence.

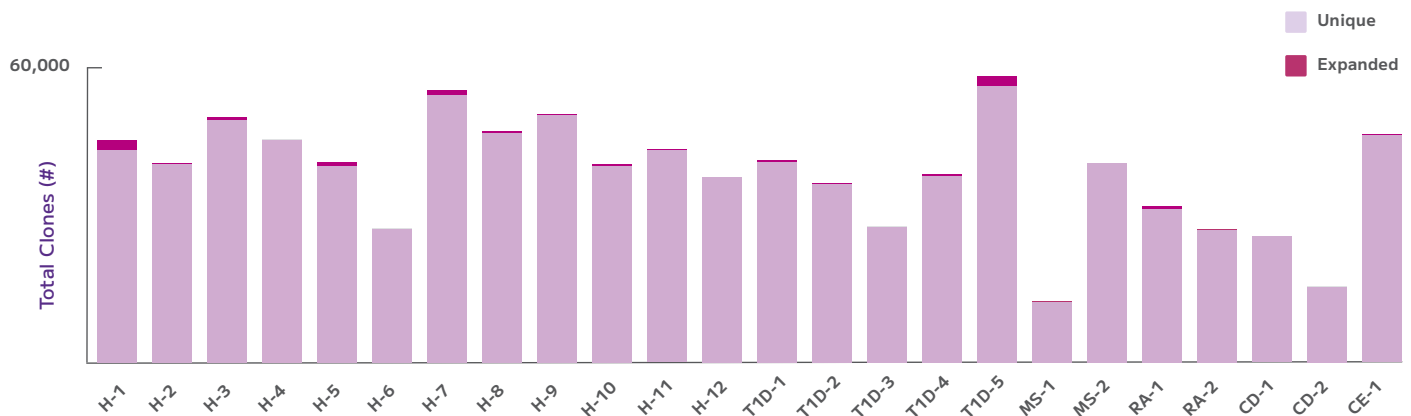
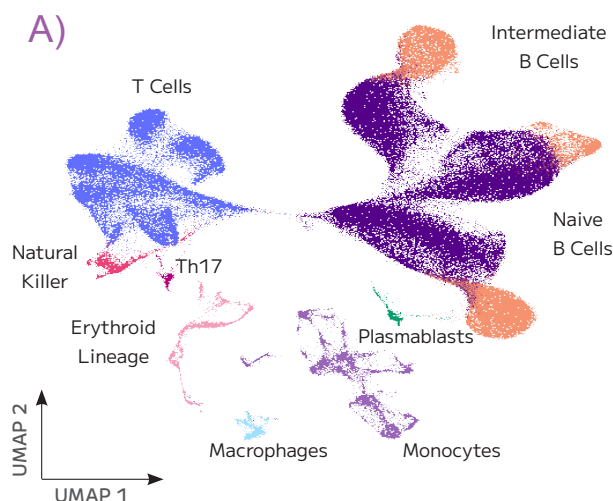


Figure 4: Number of Unique vs. Expanded Clones split by Donor. Total unique clones varied between 13,000 - 59,000 per donor where all donors had over 95% unique clones in their clone pool with donor H-1 and T1D-5 having the most expanded clones ~5%.

Mine the Mouse BCR Repertoire



Mouse models are invaluable for uncovering immune responses to pathogens and disease. However, strain-specific gene usage results in variance in antibody repertoires, complicating preclinical studies.

Evercode BCR offers the sensitivity to detect strain-specific gene usage, enabling precise selection of mouse strains with optimal heavy and light chain characteristics.

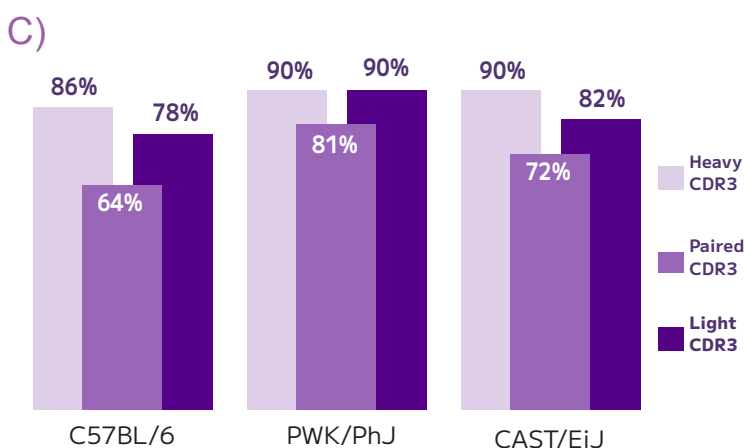
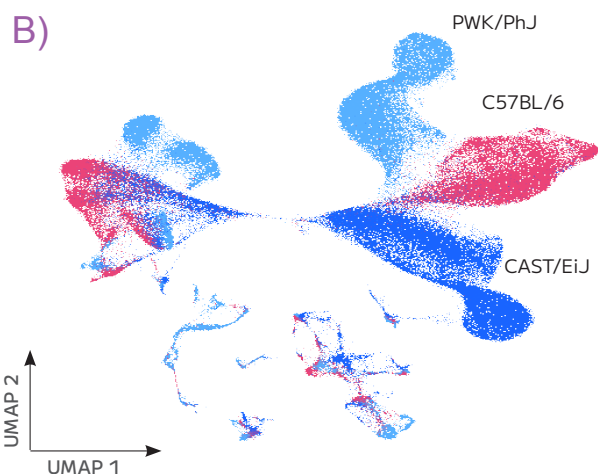


Figure 5: Transcriptomic clustering of 110,942 spleen cells pooled from three mouse strains reveals (A) cell- and (B) strain-specific identification and clustering of major B cell populations, including short-lived plasmablasts. CDR3 assignment and pairing efficiency were high across strains (C).

Reveal Differential V Gene Usage Across Strains

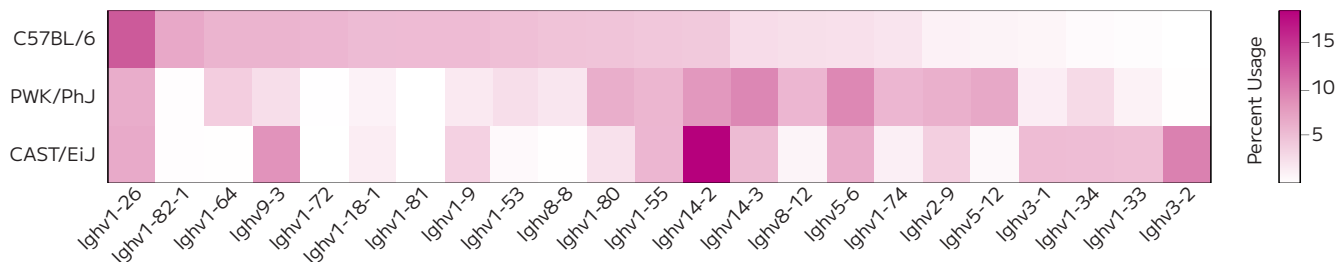


Figure 6: Heatmap of top V gene usage for three common laboratory mouse strains highlights distinct immunoglobulin heavy chain V gene patterns, offering novel insights into their unique biology.

Transgenic Mouse BCR Profiling

Skip custom primer design and validation to focus on what matters most - the data. The Evercode BCR platform offers the only single cell BCR profiling kit designed specifically for transgenic mouse models engineered to express chimeric BCRs consisting of human variable and mouse constant regions.

THE ONLY ALL-IN-ONE SOLUTION

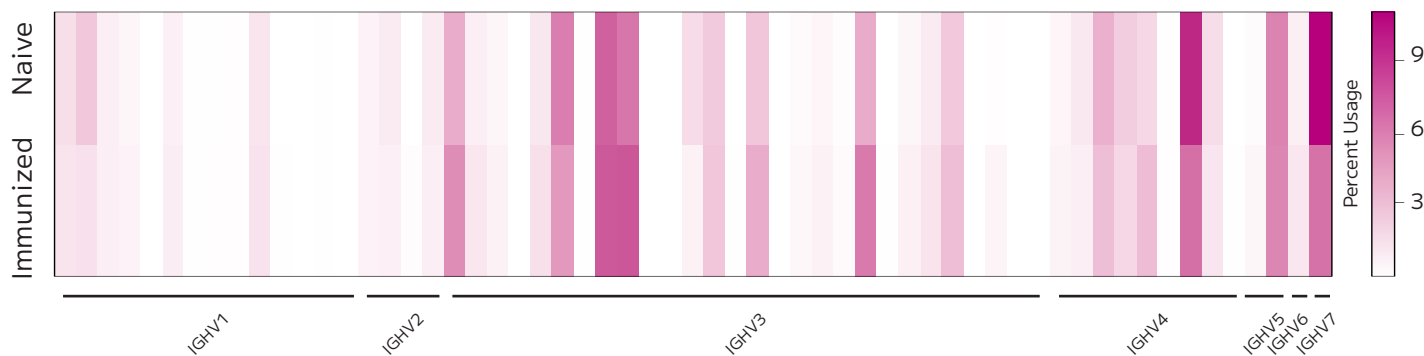
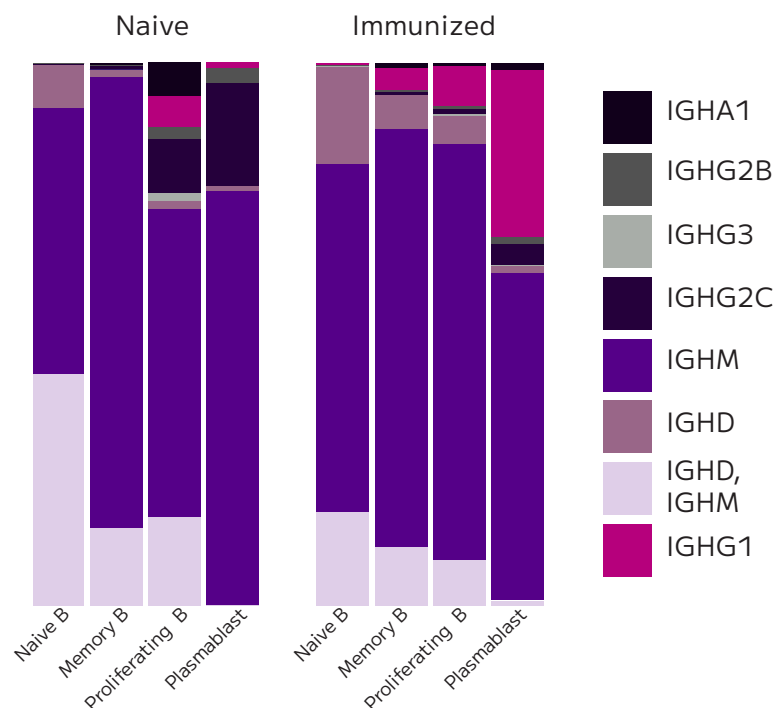


Figure 7: Evercode BCR detected full human variable region diversity in Atlas™ Transgenic Mice. Heatmap of immunoglobulin heavy chain V gene frequency in spleen-derived B cells in naive (top) and tetanus toxoid immunized (bottom) mice reveals differential gene usage following immunization.

Isotype Switching Provides Insights into Antibody Discovery



35% class-switched clonotypes

Figure 7: Matched single cell chimeric BCR and transcriptome data enabled analysis of specific immunoglobulin isotypes by cell identity. Notably, there was a large shift towards IgG1 isotype in plasmablasts of immunized Atlas mice, with a total of 35% class-switched clonotypes.

Percentage of class-switched clonotypes was calculated in plasmablasts as the number of class-switched CDR3s divided by total unique CDR3s.

PRODUCT

PART NUMBER

Evercode BCR v4, Human VDJ + WT

Up to 100,000 cells and up to 48 samples

ECIB4300

Evercode BCR v4 Mega, Human VDJ + WT

Up to 1,000,000 cells and up to 96 samples

ECIB4500

Evercode BCR, Mouse VDJ + WT

Up to 100,000 cells and up to 48 samples

ECIB4310

Evercode BCR Mega, Mouse BCR + WT

Up to 1,000,000 cells and up to 96 samples

ECIB4510

Evercode BCR, Transgenic Mouse VDJ + WT

Up to 100,000 cells and up to 48 samples

ECIB4320

Evercode BCR Mega, Transgenic Mouse VDJ + WT

Up to 1,000,000 cells and up to 96 samples

ECIB4520

Evercode Cell Fixation v3

Up to 12 samples

ECFC4300

Evercode Cell Fixation v4, HT

High throughput fixation for 96 samples

ECFC4500

Evercode Low Input Cell Fixation v4

Input as low as 10,000 cells

ECLC4500

Your Insights Matter to Us

parsebiosciences.com | info@parsebiosciences.com



For research use only. Not for use in diagnostic procedures.

Evercode BCR Technical Brochure - Version 1.1

© 2026 Parse Biosciences, Inc. All rights reserved.

All trademarks are the property of Parse Biosciences unless otherwise specified.

[Explore more resources](#)