

dCODE DEXTRAMER®

dCODE DEXTRAMER® REAGENTS

Fluorochrome-labeled MHC Dextramer® reagents are used to identify antigen-specific T cells using flow cytometry.

dCODE Dextramer® technology enables MHC I and II Dextramer® reagents to be combined with sequence-based phenotyping of antigen-specific T cells by linking a DNA barcode to the MHC Dextramer® reagent.

Each dCODE Dextramer® carries a unique DNA barcode matching the MHC-peptide specificity on the Dextramer®. This barcode enables detection of antigen-specific T cells by PCR followed by Next Generation Sequencing.

The dCODE Dextramer® technology provides a new understanding of T-cell immunology in cancer, allergy, infectious and autoimmune diseases and may be used in:

- Biomarker assays
- Epitope discovery
- Neo-antigen identification
- Immune monitoring
- Patient stratification

KEY FEATURES OF dCODE DEXTRAMER®

- Identifies antigen-specific T cells based on TCR recognition
- Unique barcode label for each specificity
- Allows massive multiplexing
- Applicable in Next Generation Sequencing assays
- Compatible with single cell gene expression analysis

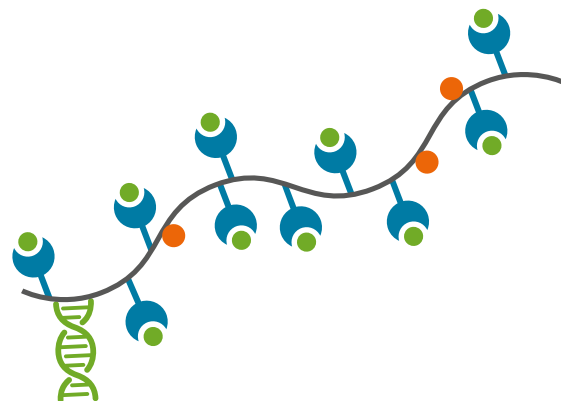
dCODE Dextramer® reagents are available with either MHC I or MHC II, and come as single reagents as well as packages of customer-defined panels.

REFERENCE

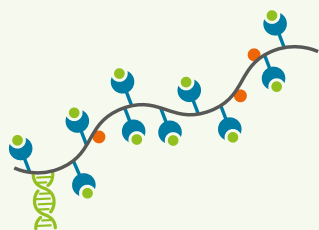
dCODE Dextramer® reagents have the potential to identify > 1000 antigen-specific T-cell populations within a single sample:

Bentzen, AK. et al. "Large-scale detection of antigen-specific T-cells using peptide-MHC I multimers labeled with DNA barcodes", Nature Biotechnology 34, 1037-1045 [2016]

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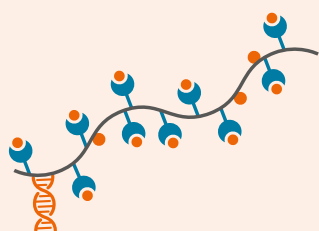


dCODE DEXTRAMER® PORTFOLIO



dCODE DEXTRAMER® [HIT]

- DNA oligo barcoded Dextramer for High-throughput analysis
- Bulk analysis of antigen-specific T cells by sequencing of the DNA oligo barcode



dCODE DEXTRAMER® [10X COMPATIBLE]

- DNA oligo barcoded Dextramer for single cell multi-omic analysis
- DNA barcode compatible with 10x Chromium system using Feature Barcode protocol
- Single cell analysis of antigen-specific populations
- TCR sequencing



dCODE® KLICKMER

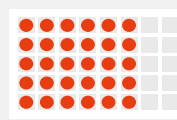
- DNA oligo barcoded Klickmer to create customized dCODE reagents
- DNA barcode formats: HiT and 10x
- Applications: attachment of B-cell antigens for B-cell detection, attachment of loadable MHC, attachment of ligands to identify low-affinity receptors, scaffold for cell stimulation.

PRODUCT GRADES



GOLD

- Single reagents
- Peptide loading confirmed by quality control
- All MHC I and MHC II alleles from Immudex' catalog are available
- Identification of antigen specific T cells
- Validation of epitope discovery findings
- Screening of few antigen specificities
- Routine screening



EXPLORE

- Panels of 16, 32, 48, 64, 80, 96, n x 96
- Peptide loaded via peptide exchange
- Peptide loading based on peptide-allele affinity, not quality controlled
- Available MHC I alleles: A*0101, A*0201, A*0301, A*1101, B*0702, B*0801
- Epitope discovery, neoantigen screening