

Technical Data Sheet

Oligo Hamster Anti-Mouse V# 2 T-Cell Receptor

Product Information

Material Number:	940352
Size:	25 Tests
Clone:	UC3-10A6
Alternative Name:	V gamma 2 TCR; Vγ2 TCR; Trgv2
Reactivity:	Mouse (Tested in Development)
Isotype:	Armenian Hamster IgG1, κ
Immunogen:	Not Reported
Application:	Single Cell 3' Sequencing (Qualified)
Barcode Sequence:	CGAATGTCAGGTTAATAGCGAGAATGGAATAGTGTC
SeqID:	AMM2155
Volume Per Test:	2 μl
Entrez Gene ID:	21636
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The UC3-10A6 monoclonal antibody specifically recognizes T-cell Receptor (TCR) V gamma 2 (Vγ2). Vγ2+ TCRγδ cells make up significant proportions of TCRγδ cells in the late fetal and adult thymus and adult peripheral lymphoid tissues and lung. The frequency of splenic Vγ2+ TCRγδ cells differs among inbred mouse strains; in C57BL/6 mice, the frequency increases dramatically during the four weeks after birth. Immobilized UC3-10A6 antibody can activate Vγ2+ TCRγδ cells. Please note that the Vγ2 designation correlates with the nomenclature of Garman, Doherty, and Raulet; the Vy4 designation of Heiligand Tonegawa is equivalent.

Application Notes

The antibody was conjugated to an oligonucleotide that contains an antibody clone-specific barcode (ABC) flanked by a poly-A tail on the 3' end and a PCR handle (PCR primer binding site) on the 5' end. The ABC for this antibody was designed to be used with other BD AbSeq oligonucleotides conjugated to other antibodies. All AbSeq ABC sequences were selected in silico to be unique from human and mouse genomes, have low predicted secondary structure, and have high Hamming distance within the BD AbSeq portfolio, to allow for sequencing error correction and unique mapping. The poly-A tail of the oligonucleotide allows the ABC to be captured by the BD Rhapsody™ system. The 5' PCR handle allows for efficient sequencing library generation for Illumina sequencing platforms.

NOTE: The BD Rhapsody Single-Cell Analysis System must be used with the BD Rhapsody Express Instrument.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography and conjugated to BD AbSeq oligonucleotide under optimal conditions.

Recommended Assay Procedure

Put all BD AbSeq Reagents to be pooled into a Latch Rack for 500 μL Tubes (Thermo Fisher Scientific Cat. No. 4900). Arrange the tubes so that they can be easily uncapped and re-capped with an 8-Channel Screw Cap Tube Capper (Thermo Fisher Scientific Cat. No. 4105MAT) and the reagents aliquoted with a multi-channel pipette.

BD AbSeq tubes should be centrifuged for ≥ 30 seconds at 400 × g to ensure removal of any content in the cap/tube threads prior to the first opening.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	
633701	Single-Cell Analysis System	1 Each	
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2

Product Notices

1. This reagent has been pre-diluted for use at the recommended volume per test. Typical use is 2 µl for 1 × 10⁶ cells in a 200-µl staining reaction.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
5. Illumina is a trademark of Illumina, Inc.
6. This product is covered by one or more of the following patents: US 8,835,358; US 9,290,808; US 9,290,809; US 9,315,857; US 9,567,645; US 9,567,646; US 9,598,736; US 9,708,659; and US 9,816,137. This product, and only in the amount purchased by buyer, may be used solely for buyer's own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. Diagnostic uses require a separate license.
7. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
8. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.
9. Please refer to bd.com/genomics-resources for technical protocols.

References

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