Technical Data Sheet

Oligo Mouse Anti-Bcl-6

Product Information

Material Number:940520Size:25 TestsClone:K112-91

Alternative Name: BCL6; B-cell lymphoma 6 protein; LAZ3; Laz-3, ZBTB27, ZNF51

Reactivity: Tested in Development:Human,Mouse

Isotype: Mouse IgG1, κ

Application: Single Cell 3' Sequencing Intracellular CITE-seq(Tested During

Development)

Barcode Sequence: GGATTATGCTCGGTTTAGTGTTGGTGACGCT

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Regulatory Status: RUC

Description

The K112-91 monoclonal antibody specifically binds to Bcl-6. Bcl-6 was first identified as a proto-oncogene frequently deregulated by chromosomal translocations in non-Hodgkin B-cell lymphomas. It is a nuclear transcriptional repressor of the BTB/POZ zinc-finger family of transcription factors. In addition to its roles in cancer, Bcl-6 plays important roles in the differentiation of normal cells including B cells, thymocytes, CD4+ or CD8+ T cells. Bcl-6 is highly expressed in germinal center B cells, where it promotes the germinal center reaction by inducing proliferation and inhibiting the DNA-damage response. Bcl-6 has been identified as a key factor in promoting the differentiation of CD4+ follicular T helper (Tfh) cells that are involved in promoting germinal center formation and providing help to B cells. The interplay of Bcl-6 and another transcriptional repressor, Blimp-1, is thought to be critical in defining the results of both B-cell and T-cell differentiation.

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 $500 \, \mu L$ 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 $400 \times g$ to ensure removal of any content in the cap/tube threads prior to the first opening.

When using BD® AbSeq intracellular markers with the Single Cell 3' Sequencing Intracellular CITE-seq, cells must first be fixed and permeabilized using the BD Rhapsody™ Intracellular AbSeq Buffer Kit before the antibody-oligo can bind to the protein. Refer to the list of required companion products below and see BD Rhapsody™ System Single-Cell Labelling with BD® AbSeq Ab-Oligos for Intracellular CITE-seq (Doc ID: 23-24464) for the complete BD® AbSeq intracellular multiomics staining protocol. Contact your local Field Application Specialist (FAS) for additional guidance.

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to regdocs.bd.com or contact BD Biosciences technical support at scomix@bdscomix.bd.com. Warning: All biological specimens and materials contacting them are considered biohazardous. Handle as if capable of transmitting infection and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

Suggested Companion Products

Catalog Number	Name	Size
570742	Intracellular AbSeq Buffer Kit	1 Each
570750	AbSeq Enhancer Kit	1 Each
570908	OMICS-Guard Sample Preservation Buffer Kit	12 Each
570751	RNase Inhibitor	1 Each

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633801	Whole Transcriptome Analysis (WTA) Amplification Kit	1 Each
554656	Stain Buffer (FBS)	500 mL
666262	8-Lane Cartridge	1 Each
564219	Human BD Fc Block™	50 μg
664887	Enhanced Cartridge Reagent Kit	1 Each
633733	Cartridge Kit	1 Each
625970	Immune Discovery Panel	5 Tests
633773	cDNA Kit	1 Each
633781	Hu Single Cell Sample Multiplexing Kit	1 Each
570911	OMICS-Guard Sample Preservation Buffer	50 mL
633707	Express Single-Cell Analysis System Package	1 EA
633701	Single-Cell Analysis System	1 EA

Product Notices

- 1. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
- 2. This reagent has been pre-diluted for use at the recommended volume per test. Typical use is 2 μ l for 1 × 10⁶ cells in a 200- μ l staining reaction.
- 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 7. Species cross-reactivity detected in product development may not have been confirmed on every format and/or application.
- 8. Please refer to http://regdocs.bd.com to access safety data sheets (SDS).
- 9. Please refer to bd.com/genomics-resources for technical protocols.
- 10. For U.S. patents that may apply, see bd.com/patents.

References

Baumjohann D, Okada T, Ansel KM. Cutting Edge: Distinct Waves of BCL6 Expression during T Follicular Helper Cell Development. J Immunol. 2011; 187(5):2089-2092. (Clone-specific: Flow cytometry).

Chung Y, Tanaka S, Chu F, et al. Follicular regulatory T cells expressing Foxp3 and Bcl-6 suppress germinal center reactions. Nat Med. 2011; 17(8):983-988. (Clone-specific: Flow cytometry).

Choi YS, Kageyama R, Eto D, et al. ICOS receptor instructs T follicular helper cell versus effector cell differentiation via induction of the transcriptional repressor Bcl6.. Immunity. 2011; 34(6):932-46. (Clone-specific: Flow cytometry).

Crotty S. Follicular Helper CD4 T Cells (Tfh). Annu Rev Immunol. 2011; 29(1):621-663. (Biology).

Crotty S, Johnston RJ, Schoenberger SP. Effectors and memories: Bcl-6 and Blimp-1 in T and B lymphocyte differentiation. Nat Immunol. 2010; 11(2):114-120. (Biology).

Eto, D., C. Lao, et al. IL-21 and IL-6 are critical for different aspects of B cell immunity and redundantly induce optimal follicular helper CD4 T cell (Tfh) differentiation. PLoS ONE. 2011; 6(3):e17739. (Clone-specific: Flow cytometry).

Fazilleau N, McHeyzer-Williams LJ, Rosen H, McHeyzer-Williams MG. The function of follicular helper T cells is regulated by the strength of T cell antigen receptor binding. Nat Rev Immunol. 2009; 10(4):375-384. (Biology).

Johnston RJ, Poholek AC, DiToro D, et al. Bcl6 and Blimp-1 are reciprocal and antagonistic regulators of T follicular helper cell differentiation.. Science. 2009; 325(5943):1006-10. (Biology).

Klein U, Dalla-Favera R. Germinal centres: role in B-cell physiology and malignancy. Nat Rev Immunol. 2008; 8(1):22-33. (Biology).

Nurieva RI, Chung Y, Martinez GJ, et al. Bcl6 mediates the development of T follicular helper cells. Science. 2009; 325(5943):1001-1005. (Biology).

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 United States
 Canada
 Europe
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 877.232.8995
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