

Technical Data Sheet

Oligo Mouse Anti-Human CD268 (BAFF Receptor)

Product Information

Material Number:	940284
Size:	25 Tests
Clone:	11C1
Alternative Name:	BAFF Receptor; BAFF-R; BlyS receptor 3; BR3; TNFRSF13C
Reactivity:	Human (Tested in Development)
Isotype:	Mouse C57BL/6 IgG1, κ
Immunogen:	Human BAFF-R Transfected Cell Line
Application:	Single Cell 3' Sequencing (Qualified)
Barcode Sequence:	TGTGAATGAGTTAAGCGTCGCGGATATGTAGAGCCT
SeqID:	AHS0206
Volume Per Test:	2 μ l
Entrez Gene ID:	115650
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.
Regulatory Status:	RUO

Description

The 11C1 monoclonal antibody recognizes CD268 which is also known as the B cell activating factor receptor (BAFF-R). CD268 is a type III transmembrane protein of approximately 184 residues. BAFF-R is one of the receptors for B-cell activating factor (BAFF), a member of the TNF family of proteins. BAFF is a key regulator for B cell differentiation and critical in regulating survival and activation of peripheral B cell populations. Experiments in the mouse model show that interaction of BAFF with BAFF-R promotes NF- κ B activity. Overexpression of BAFF results in an expanded B cell compartment and autoimmunity in mice. Mice injected with BAFF-neutralizing-Fc (BAFF-R-Fc) protein showed reduced NF- κ B activation, blocking BAFF-induced B cell proliferation. Reports suggest that the BAFF-BAFF-R interaction may lead to a better understanding of autoimmune disorders.

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 Section

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 μ 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.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS) RUO	500 mL	
633701	Single-Cell Analysis System RUO	1 Each	
564219	Human BD Fc Block™ RUO	50 mg	
564220	Human BD Fc Block™ RUO	0.25 mg	

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. Please refer to bd.com/genomics-resources for technical protocols.

References

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- Yan M, Brady JR, Chan B, et al. Identification of a novel receptor for B lymphocyte stimulator that is mutated in a mouse strain with severe B cell deficiency. *Curr Biol.* 2001; 11(19):1547-1552.

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