

## Technical Data Sheet

**Oligo Mouse Anti-Mouse CD286 (TLR6)**

## Product Information

Material Number:	940398
Size:	25 Tests
Clone:	C1N2
Alternative Name:	Tlr6; Toll-like receptor 6
Reactivity:	Mouse (Tested in Development)
Isotype:	Mouse BALB/c IgG1, $\kappa$
Immunogen:	Mouse TLR6
Application:	Single Cell 3' Sequencing (Qualified)
Barcode Sequence:	CTGTTGGCGTTTATTTCGTGTGATGATGATTGGC
SeqID:	AMM2125
Volume Per Test:	2 $\mu$ l
Entrez Gene ID:	21899
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.
Regulatory Status:	RUO

**Description**

The C1N2 monoclonal antibody specifically binds to the Toll-like receptor 6 (TLR6), which is also known as CD286. CD286 belongs to the mammalian toll-like family of pattern recognition receptors (TLR) that participate in inducing innate immune responses to microbial pathogens. CD286 is a type I transmembrane glycoprotein comprised of an extracellular domain with a large number of leucinerich repeats (LRRs) and a cytoplasmic region with a signaling Toll/Interleukin-1 Receptor (TIR) domain. TLR6 is differentially expressed on the surface and intracellular compartments, including endolysosomes, of pre-B cells as well as immature or mature B cells. It is likewise expressed by monocytes, macrophages, or plasmacytoid, CD4+, or CD8+ dendritic cells. In association with TLR2 (CD282), CD286 recognizes microbial diacylated lipopeptides, lipoteichoic acid, and zymosan. The CD282/CD286 (TLR2/TLR6) heterodimer then transduces signaling responses leading to the production of proinflammatory cytokines by responding cells.

## 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  $\mu$ 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  $\geq 30$  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
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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
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 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 × 10<sup>6</sup> 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](http://bd.com/genomics-resources) for technical protocols.

## References

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Marinho FA, de Paula RR, Mendes AC, et al. Toll-like receptor 6 senses *Mycobacterium avium* and is required for efficient control of mycobacterial infection. *Eur J Immunol*. 2013; 43(9):2373-85.

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