

Technical Data Sheet

Oligo Mouse Anti-Human CD85j

Product Information

Material Number:	940249
Size:	25 Tests
Clone:	GHI/75
Alternative Name:	ILT-2; ILT2; LILRB1; LIR-1; LIR1; MIR-7; MIR7; PIR-B; PIRB; leucocyte Ig-like receptor B1; leukocyte immunoglobulin-like receptor subfamily B member 1
Reactivity:	Human (Tested in Development)
Isotype:	Mouse IgG2b, κ
Immunogen:	Human Hairy Cell Leukemia Spleen Cells
Application:	Single Cell 3' Sequencing (Qualified)
Barcode Sequence:	0
SeqID:	AHS0163
Volume Per Test:	2 μ l
Workshop No.:	V B032
Entrez Gene ID:	10859
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.
Regulatory Status:	RUO

Description

CD85 molecules belong to a large immunoregulatory family and it has been clustered into different subclasses from CD85a to CD85m in the VIIth HLDA workshop. CD85j is also called as Ig-like transcript (ILT2), or leukocyte Ig-like receptor (LIR-1). Reacts with an 110 kDa membrane glycoprotein expressed on a subset of NK cells, which varies amongst individuals, and a subpopulation of T lymphocytes. Expression on T lymphocytes, NK cells may depend on the individuals tested. Function studies show that ligation of ILT2 with MHC class I including HLA-A, B, G1 and -E induces an inhibitory signal via recruitment of SHP-1 phosphatase.

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 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

554656	Stain Buffer (FBS)	500 mL
633701	Single-Cell Analysis System	1 Each
564219	Human BD Fc Block™	50 mg
564220	Human BD Fc Block™	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

- Banham AH, Colonna M, Cella M, et al. Identification of the CD85 antigen as ILT2, an inhibitory MHC class I receptor of the immunoglobulin superfamily. *J Leukoc Biol.* 1999; 65(6):841-5.
- Colonna M, Nakajima H, Navarro F, Lopez-Botet M. A novel family of Ig-like receptors for HLA class I molecules that modulate function of lymphoid and myeloid cells. *J Leukoc Biol.* 1999; 66(3):375-381.
- Colonna M, Navarro F, Bellon T, et al. A common inhibitory receptor for major histocompatibility complex class I molecules on human lymphoid and myelomonocytic cells. *J Exp Med.* 1997; 186(11):1809-1818.
- Mason D. David Mason .. et al., ed. *Leucocyte typing VII : white cell differentiation antigens : proceedings of the Seventh International Workshop and Conference held in Harrogate, United Kingdom.* Oxford: Oxford University Press; 2002; .
- McArdle JP, Knight BA, Halliday GM, Muller HK, Rowden G. Quantitative assessment of Langerhans cells in actinic keratosis, Bowen's disease, keratoacanthoma, squamous cell carcinoma and basal cell carcinoma. *Pathology.* 1986; 18(2):212-216.
- Pulford K, Jones M, Moldenhauer G, Zola H and Mason DY. CD85 workshop panel report. In: Kishimoto T, ed. *Leukocyte Typing VI.* New York: Garland Publishing; 1997; :196-198.
- Pulford K, Micklem K, Thomas J, Jones M, Mason DY. A 72-kD B cell-associated surface glycoprotein expressed at high levels in hairy cell leukaemia and plasma cell neoplasms. *Clin Exp Immunol.* 1991; 85(3):429-435.
- Schlossman SF. Stuart F. Schlossman .. et al., ed. *Leucocyte typing V : white cell differentiation antigens : proceedings of the fifth international workshop and conference held in Boston, USA, 3-7 November, 1993.* Oxford: Oxford University Press; 1995; .

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