Technical Data Sheet

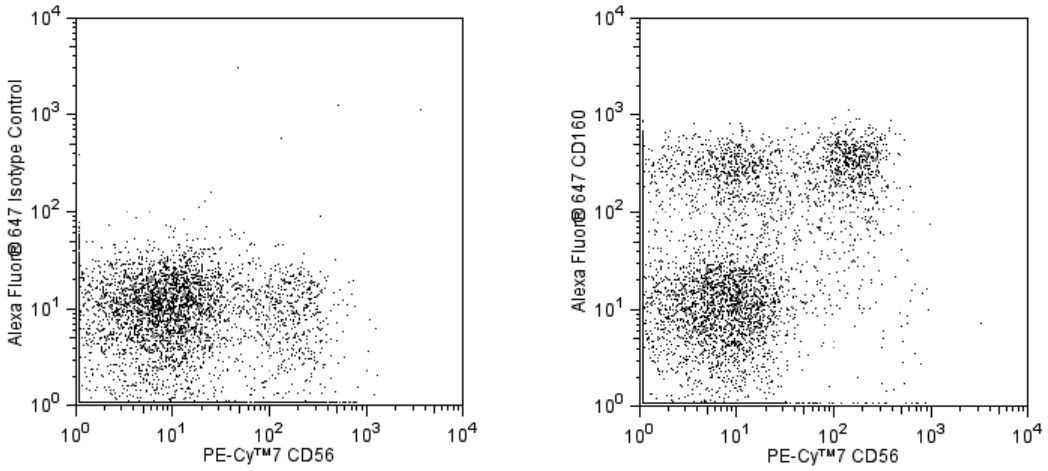
Alexa Fluor® 647 Mouse Anti-Human CD160

Product Information

Material Number:	**562362**
Alternate Name:	BY55; BY55 antigen; NK1; NK28
Size:	100 tests
Vol. per Test:	5 µl
Clone:	BY55
Immunogen:	Human YT2C2 NK Cell Line
Isotype:	Mouse (BALB/c) IgM
Reactivity:	QC Testing: Human
Workshop:	VII
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The BY55 monoclonal antibody specifically binds to the human cell surface molecule, CD160 (also known as BY55). CD160 is a glycosyolphosphatidylinositol-anchored glycoprotein member of the immunoglobulin superfamily. It is expressed on cytotoxic αβ CD8+ T cells and natural killer (NK) cells, γδ T cells and intestinal intraepithelial T lymphocytes. CD160 can bind to classical and nonclassical MHC class I molecules. This interaction can costimulate the proliferation of activated human T lymphocytes including CD28-negative T lymphocytes.



Multicolor flow cytometric analysis CD160 expression on human peripheral blood lymphocytes. *Human whole blood cells were stained with PE-Cy™7 Mouse Anti-Human CD56 (Cat. No. 557747/560916) and either Alexa Fluor® 647 Mouse IgM, κ Isotype Control (Cat. No. 560806; Left Panel) or Alexa Fluor® 647 Mouse anti-Human CD160 (Cat. No. 562362; Right Panel). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Two-color flow cytometric dot plots showing the correlated expression patterns of CD56 versus CD160 (or Ig isotype control staining) were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.*

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.

The antibody was conjugated to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
560806	Alexa Fluor® 647 Mouse IgM, κ Isotype Control	0.1 mg	G155-228
555899	Lysing Buffer	100 ml	(none)
557747	PE-Cy™7 Mouse Anti-Human CD56	100 tests	B159
560916	PE-Cy™7 Mouse Anti-Human CD56	25 tests	B159

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
8. 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.
9. Cy is a trademark of Amersham Biosciences Limited.
10. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Agrawal S, Marquet J, Freeman GJ, et al. Cutting edge: MHC class I triggering by a novel cell surface ligand costimulates proliferation of activated human T cells. *J Immunol.* 1999; 162(3):1223-1226. (Clone-specific: Flow cytometry)

Anumanthan A, Bensussan A, Boumsell L, et al. Cloning of BY55, a novel Ig superfamily member expressed on NK cells, CTL, and intestinal intraepithelial lymphocytes. *J Immunol.* 1998; 161(6):2780-2790. (Clone-specific: Flow cytometry, Immunoprecipitation)

Maiza H, Leca G, Mansur IG, Schiavon V, Boumsell L, Bensussan A. A novel 80-kD cell surface structure identifies human circulating lymphocytes with natural killer activity. *J Exp Med.* 1993; 178(3):1121-1126. (Clone-specific: Flow cytometry)

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