

Product Information

Catalog Number: 12-1601

Contents:

Phycoerythrin (PE)
 anti-mouse CD160
 (BY55)

Catalog Number:
12-1601

Sizes: 50 ug, 100
 ug

Formulation:

Phosphate buffered
 saline, pH 7.2, less
 than or equal to
 0.09% NaN₃

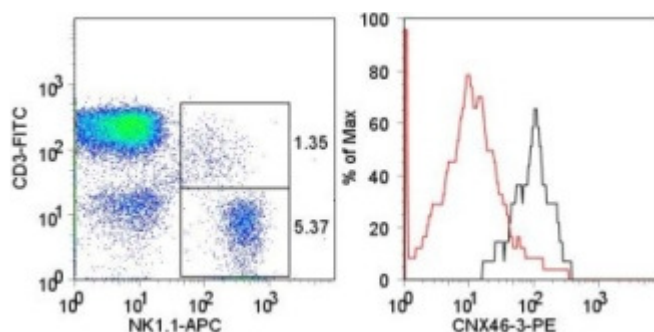
Storage

Conditions: Store
 at 4°C.

DO NOT FREEZE.
 LIGHT-SENSITIVE
 MATERIAL.

Clone: eBioCNX46-
 3 (CNX46-3)

Isotype: Rat
 IgG2b, κ



Mouse (C57/Bl6) splenocytes were stained with FITC anti-mouse CD3 (145-2C11) (cat.11-0031), APC anti-mouse NK1.1 (PK136) (cat.17-5941), and with 0.5 µg PE anti-mouse CD160 (CNX46-3) (cat.12-1601). The histogram (right panel) demonstrates staining of CD160 (CNX46-3) (cat.12-1601) on NK1.1+CD3- cells (red line) and NK1.1+CD3+ cells (black line), as gated in the dot plot (left panel).

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-1601	Phycoerythrin (PE) anti-mouse CD160 (BY55)	488	575	FC
14-1601	Affinity Purified anti-mouse CD160 (BY55)	N/A	N/A	FA FC IP WB
51-1601	Alexa Fluor® 647 anti-mouse CD160 (BY55)	633	668	FC

Description

CD160 is a glycosylphosphatidylinositol (GPI)-anchored Ig-like glycoprotein first identified on human lymphocytes with the monoclonal antibody BY55. In mice, CD160 is expressed on almost all (intestinal intraepithelial lymphocytes) iIELs, NKT cells, most TCRγδ T cells, few NK cells and a minor subset of CD8+ T cells. Murine CD160 has been shown to bind to a wide range of classical and non classical MHC class I molecules and regulate NK cell activation. In vitro, CD3 activation of murine CD8+ T cells increases the expression of CD160 and induces the release of soluble CD160 (sCD160). In human, CD160 mAb cross-linking triggers TNFα, IFNγ and IL-6 cytokine production by peripheral blood NK cells and inhibits tube formation and induces apoptosis of endothelial cells. In mice, cross-linking of CD160 with the CNX46-3 antibody regulates NK cell activation both positively and negatively, depending on the stimulus.

Applications Reported

For research use only, not for diagnostic or therapeutic use. This eBioCNX46-3 (CNX46-3) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This eBioCNX46-3 (CNX46-3) antibody has been tested by flow cytometric analysis of C57BL/6 mouse splenocyte suspensions. This can be used at less than or equal to 1 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Fons P, Chabot S, Cartwright JE, Lenfant F, L'Faqihi F, Giustiniani J, Herault JP, Gueguen G, Bono F, Savi P, Aguerre-Girr M, Fournel S, Malecaze F, Bensussan A, Plouët J, Le Bouteiller P. Soluble HLA-G1 inhibits angiogenesis through an apoptotic pathway and by direct binding to CD160 receptor expressed by endothelial cells. *Blood*. 2006 Oct 15;108(8):2608-15.

Tsujimura K, Obata Y, Matsudaira Y, Nishida K, Akatsuka Y, Ito Y, Demachi-Okamura A, Kuzushima K, Takahashi T. Characterization of murine CD160+ CD8+ T lymphocytes. *Immunol Lett*. 2006 Jul 15;106(1):48-56.

Maeda M, Carpenito C, Russell RC, Dasanjh J, Veinotte LL, Ohta H, Yamamura T, Tan R, Takei F. Murine CD160, Ig-like receptor on NK cells and NKT cells, recognizes classical and nonclassical MHC class I and regulates NK cell activation. *J Immunol*. 2005 Oct 1;175(7):4426-32.(CNX46-3, FC, IP, WB, FA PubMed)

Barakonyi A, Rabot M, Marie-Cardine A, Aguerre-Girr M, Polgar B, Schiavon V, Bensussan A, Le Bouteiller P. Cutting edge: engagement of CD160 by its HLA-C physiological ligand triggers a unique cytokine profile secretion in the cytotoxic peripheral blood NK cell subset. *J Immunol*. 2004 Nov 1;173(9):5349-54.

Anumanthan A, Bensussan A, Boumsell L, Christ AD, Blumberg RS, Voss SD, Patel AT, Robertson MJ, Nadler LM, Freeman GJ. Cloning of BY55, a novel Ig superfamily member expressed on NK cells, CTL, and intestinal intraepithelial lymphocytes. *J Immunol*. 1998 Sep 15;161(6):2780-90.

Related Products

- Cat. 11-0031 FITC Hamster anti-mouse CD3 (epsilon subunit; CD3e) (clone 145-2C11)
- Cat. 12-4031 Phycoerythrin (PE) Rat IgG2b Isotype Control
- Cat. 17-5941 APC anti-mouse NK-1.1 (NK1.1, NKR-P1C, Ly-55) (clone PK136)