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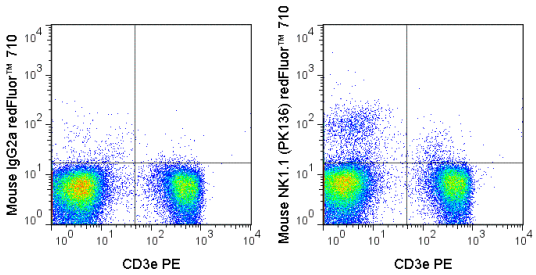
TECHNICAL DATA SHEET

redFluor™ 710 Anti-Mouse NK1.1 (CD161) (PK136)

Catalog Number: 80-5941

PRODUCT INFORMATION

Contents:	redFluor™ 710 Anti-Mouse NK1.1 (CD161) (PK136)
Isotype:	Mouse IgG2a, kappa
Concentration:	0.2 mg/mL
Clone:	PK136
Reactivity:	Mouse
Use By:	12 months from date of receipt
Storage Conditions:	2-8°C protected from light
Formulation:	10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with PE Anti-Mouse CD3e (50-0031) and 0.125 ug redFluor™ 710 Anti-Mouse NK1.1 (CD161) (80-5941) (right panel) or 0.125 ug redFluor™ 710 Mouse IgG2a isotype control (left panel).

DESCRIPTION

The PK136 antibody is specific for mouse NK1.1, a type II transmembrane lectin-like receptor and member of the killer cell lectin-like receptor (KLR) family. NK1.1 is prominently expressed on natural killer (NK) cells, and is correlated with NK cytotoxic effects toward virus-infected cells and tumor cells. NK1.1 is expressed on subsets of NKT cells in certain mouse strains (C57BL/6, FVB/N, and NZB), yet absent from others (AKR, BALB/c, CBA/J, C3H, DBA/1, DBA/2, NOD, SJL, and 129). Putative subsets of NK cells and their expression of NK1.1 antigen are of continuing interest, including NK1.1+/CD117+ (c-Kit) cells reported to be immunosuppressive for CD8+ T cells in a mechanism involving PD-1 and PD-L1 (Ehlers et al. 2012. Endocrinology. 10: 1247).The PK136 antibody may be used for detection of NK1.1 expression on mouse strains including CE, B6, NZB, C58, Ma/My, ST, SJL, and FVB. The antibody is reported to react with an epitope common to NKR-P1B and NKR-P1C alloantigenic forms of NK1.1 (Carlyle et al. 2006. J. Immunol. 176: 7511-7524).

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

redFluor™ 710 dye is excited by the red (633-647 nm) laser and has a peak emission of 710 nm. The recommended band pass filter for this dye is 710/50. redFluor™ 710 can be used as an alternative for Alexa Fluor® 700. Confirm that your cytometer is configured to detect this fluorochrome.

REFERENCES

Krebs DL, Chehal MK, Sio A, Huntington ND, Da ML, Ziltener P, Inglese M, Kountouri N, Priatel JJ, Jones J, Tarlinton DM, Anderson GP, Hibbs ML, and Harder KW. 2012. J. Immunol. 188:5094-5105. (in vivo depletion)Lubinski JM, Lazear HM, Awasthi S, Wang F, and Friedman HM. 2011. J. Virol. 85(7): 3239-3249. (in vivo depletion)Diamond MS, Kinder M, Matsushita H, Mashayekhi M, Dunn GP, Archambault JM, Lee H, Arthur CD, White JM, Kalinke U, Murphy KM, and Schreiber RD. 2011. J. Exp. Med. 208: 1989-2003. (in vivo depletion)Awasthi A, Samarakoon A, Chu H, Kamalakannan R, Quilliam LA, Chrzanowska-Wodnicka M, White GC, and Malarkannan S. 2010. J. Exp. Med. 207: 1923-1938. (in vitro activation)Coudert JD, Scarpellino L, Gros F, Vivier E, and Held W. 2008 Blood. 111: 3571-3578. (Immunoprecipitation) Ljutic B, Carlyle JR, Filipp D, Nakagawa R, Julius M, and Zuniga-Pflucker JC. 2005. J. Immunol. 174: 4789-4796. (Immunoprecipitation) Kanwar JR, Shen W-P, Kanwar RK, Berg RW, and Krissansen GW. 2001. J. Natl. Cancer Inst. 93: 1541-1552. (Immunohistochemistry – frozen tissue, Immunofluorescence microscopy – frozen tissue, in vivo depletion)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.