

TECHNICAL DATA SHEET

# In Vivo Ready™ Anti-Mouse NK1.1 (CD161) (PK136)

Catalog Number: 40-5941

## PRODUCT INFORMATION

**Contents:** In Vivo Ready™ Anti-Mouse NK1.1 (CD161) (PK136)

**Isotype:** Mouse IgG2a, kappa

**Concentration:** 2 mg/mL

**Clone:** PK136

**Reactivity:** Mouse

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, pH7.2

**Endotoxin Level:** Less than or equal to 0.01 EU/ug, as determined by the LaL assay

## 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 preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

## APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

## REFERENCES

Krebs DL, Chehal MK, Sio A, Huntington ND, Da ML, Ziltener P, Inglesse 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, Chrzanoska-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, Philipp 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)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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