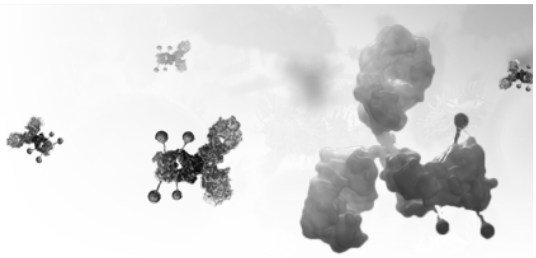

Mouse Anti-Mouse NK1.1 Monoclonal antibody, clone PK136 (CABT-L4348)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The PK136 monoclonal antibody reacts with mouse NK1.1 also known as CD161b/CD161c, KLRB1, NKR-P1A and Ly-55. NK1.1 is a type II integral membrane glycoprotein with a C-type lectin domain and is encoded by the Klrb1c/NKR-P1C gene. NK1.1 plays roles in NK cell activation and differentiation, IFN-γ production, cytotoxic granule release, and is thought to be involved in the generation of Th2 cells. NK1.1 is predominantly expressed as a disulfide-linked homodimer on NK cells however, it is also expressed on NK-T cells, a rare population of T lymphocytes. NK 1.1 is only expressed by C57BL/6, FVB/N, and NZB strains of mice and not AKR, BALB/c, CBA/J, C3H, DBA/1, DBA/2, NOD, SJL, and 129 strains.
Target	Mouse NK1.1
Immunogen	Mouse spleen and bone marrow cells enriched for NK1+ cells
Isotype	IgG2a, κ
Source/Host	Mouse
Species Reactivity	Mouse
Clone	PK136
Purification	Protein A purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo NK cell depletion, FC
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility

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Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The human protein has received the designation CD161, and the mouse proteins have been referred to as CD161a, -b, -c etc.Although previously thought to recognize only CD161c, recent data has shown that the QL247 antibody may also react with CD161b. CD161c expression itself is strain specific in mice, but recognition of CD161b by QL247 appears to be even more complex, as only some CD161b positive strains are labelled by the antibody. Engagement of CD161c has been reported to have activating function in NK cells, whilst engagement of CD161b is inhibitory.
Keywords	Klrb1c;killer cell lectin-like receptor subfamily B member 1C;Nk1;Ly59;Nk-1;CD161;Ly-59;Ly55c;NK1.1;NKRP1

GENE INFORMATION

Official Symbol	killer cell lectin-like receptor subfamily B member 1C
Synonyms	Klrb1c; killer cell lectin-like receptor subfamily B member 1C; Nk1; Ly59; Nk-1; CD161; Ly-59; Ly55c; NK1.1; NKRP1
References	Burrack, K. S., et al. (2018). "Interleukin-15 Complex Treatment Protects Mice from Cerebral Malaria by Inducing Interleukin-10-Producing Natural Killer Cells." Immunity 48(4): 760-772 e764. PubMed;Guo, Z., et al. (2014). "PD-1 blockade and OX40 triggering synergistically protects against tumor growth in a murine model of ovarian cancer." PLoS One 9(2): e89350. PubMed;Uddin, M. N., et al. (2014). "TNF-alpha-dependent hematopoiesis following Bcl11b deletion in T cells restricts metastatic melanoma." J Immunol 192(4): 1946-1953. PubMed;Walsh, K. B., et al. (2014). "Animal model of respiratory syncytial virus: CD8+ T cells cause a cytokine storm that is chemically tractable by sphingosine-1-phosphate 1 receptor

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