Alexa Fluor® 700 anti-mouse NK-1.1

Catalog # / $1382560 / 100 \mu g$

Size: 1382555 / 25 μg

Clone: S17016D

Isotype: Mouse IgG2a, κ

Immunogen: Mouse NK1.1-transfectants

Reactivity: Mouse

Preparation: The antibody was purified by affinity

chromatography and conjugated with

Alexa Fluor® 700 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide

Workshop Number: **HCDM** listed

Concentration: 0.5 mg/mL

C57BL/6 mouse splenocytes were stained with CD49b (DX5) PE and NK-1.1 (clone S17016D) Alexa Fluor® 700 (left) or mouse IgG2a, κ Alexa Fluor® 700 isotype

control (right).



Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is $\leq 0.5~\mu g$ per million cells in $100~\mu L$ volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of

exciting and detecting the fluorochrome.

Application

Notes:

Clone S17016D cross-blocks anti-mouse NK1.1 clone PK136, and can stain for NK1.1 post-formal dehyde and methanol-based fixation based on in-house

testing.

Application References:

1. Hastings WD, et al. 2009. Eur. J. Immunol. 39:2492. (Costim)

2. Jones RB, et al. 2008. J. Exp. Med. 205:2763. (Block)

3. Klibi J, et al 2009. Blood 113:1957. (FC, Block)

Description: NK-1.1 surface antigen, also known as CD161b/CD161c and Ly-55, is

encoded by the NKR-P1B/NKR-P1C gene. It is expressed on NK cells and NK-T cells in some mouse strains, including C57BL/6, FVB/N, and NZB, but not AKR, BALB/c, CBA/J, C3H, DBA/1, DBA/2, NOD, SJL, and 129. Expression of NKR-P1C antigen has been correlated with lysis of tumor cells *in vitro* and rejection of bone marrow allografts *in vivo*. NK-1.1 has also been shown to play a role in NK cell activation, IFN-γ production, and cytotoxic granule release. NK-1.1 and DX5 are commonly used as mouse NK cell markers.

Antigen References:

- Lanier LL. 1997. Immunity 6:371.
 Yokoyama WM, Seaman WE. 1993. Annu. Rev. Immunol. 11:613.
 Koo GC, et al. 1986. J. Immunol. 137:3742.
 Giorda R, Trucco M. 1991. J. Immunol. 147:1701.