Mouse NKp46/NCR1 Fluorescein-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB2225F
100 TESTS, 25 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse NKp46/NCR1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 15% cross-reactivity with recombinant human (rh) NKp46 and less than 1% cross-reactivity with rhNKp80 and rhNKp30 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NKp46/NCR1 Glu22-Asn255 Accession # Q8C567
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

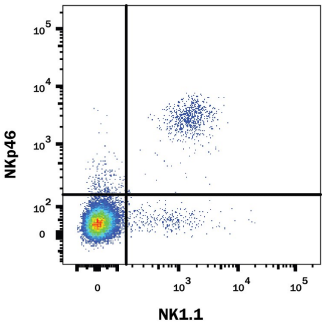
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of NKp46/NCR1 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Goat Anti-Mouse NKp46/NCR1 Fluorescein-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB2225F) and Mouse Anti-Mouse CD161/NK1.1 APC-conjugated Monoclonal Antibody (Catalog # FAB8319A). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

BACKGROUND

NKp46, along with NKp30 and NKp44, are activating receptors that have been collectively termed the natural cytotoxicity receptors (NCR) (1). These receptors are expressed almost exclusively by NK cells and play a major role in triggering some of the key lytic activities of NK cells. In human systems, the $CD56^{dim}CD16^{+}$ subpopulation that makes up the majority of NK cells in the peripheral blood and spleen expresses NKp46 in both resting and activated states (2). The main NK cell population of the lymph node ($CD56^{bright}CD16^{-}$) expresses low levels of NKp46 in resting cells, but expression is upregulated by IL-2. Mouse NKp46, also known as MAR-1 (3), is a type I transmembrane protein with two extracellular Ig-like domains. It has a positive charge in its transmembrane domain that permits association with the ITAM-bearing signal adapter proteins, CD3ζ and FcεRIγ (4). Studies with neutralizing antibodies indicate that the three NCR are primarily responsible for triggering the NK-mediated lysis of many human tumor cell lines. Blocking any of the NCRs individually resulted in partial inhibition of tumor cell lysis, but nearly complete inhibition of lysis was observed if all three receptors were blocked simultaneously (5). NKp46 has also been implicated in recognition of virus-infected cells through its capacity to bind to viral hemagglutinins (6-8).

References:

1. Moretta, L. and A. Moretta (2004) EMBO J. **23**:255.
2. Ferlazzo, G. *et al.* (2004) J. Immunol. **172**:1455.
3. Biassoni, R. *et al.* (1999) Eur. J. Immunol. **29**:1014.
4. Westgaard, I. *et al.* (2004) J. Leukoc. Biol. PMID 15356098.
5. Pende, D. *et al.* (1999) J. Exp. Med. **190**:1505.
6. Arnon, T. *et al.* (2004) Blood **103**:664.
7. Arnon, T. *et al.* (2001) Eur. J. Immunol. **31**:2680.
8. Mandelboim, O. *et al.* (2001) Nature **409**:1055.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956