Mouse NKp46/NCR1 Antibody

Monoclonal Rat IgG_{2A} Clone # 1123903

Catalog Number: MAB11814

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects recombinant mouse NKp46/NCR1 protein in Direct ELISA.
Source	Monoclonal Rat IgG_{2A} Clone # 1123903
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse MAR-1 Glu22-Asp255 Accession # Q8C567
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.

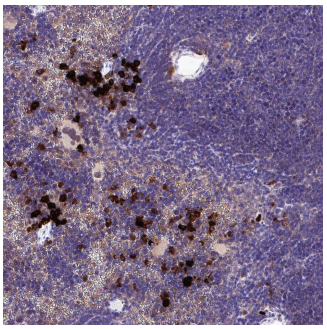
APPLICATIONS

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
Immunohistochemistry	0.25-25 µg/mL	Perfusion fixed paraffin-embedded sections of mouse spleen

DATA

Immunohistochemistry



Perfusion fixed paraffin-embedded sections of mouse spleen NKp46/NCR1 was detected in perfusion fixed paraffin-embedded sections of mouse spleen using Rat Anti-Mouse NKp46/NCR1 Monoclonal Antibody (Catalog # MAB11814) at 0.5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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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 Fcε RIγ (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:

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