

10-3528: Monoclonal Antibody to mouse NIMP-R14(Discontinued)

Clonality :	Monoclonal
Clone Name :	NIMP-R14
Application :	FACS
Reactivity :	Mouse
Isotype :	Rat IgG2b
Immunogen Information :	Purified BALB/c mouse neutrophils

Description

The monoclonal antibody NIMP-R14 is highly specific for murine Ly-6G and Ly-6C. The Ly-6G/-6C locus encodes a family of Ly-6 proteins including Ly-6G and Ly-6C. Ly-6 antigens have a molecular weight between 15,000 and 18,000. Ly6G is together with Ly6c a component of the myeloid differentiation antigen Gr-1. Ly6G a GPI-anchored protein and is a good marker of peripheral neutrophils. Although predominantly presents on neutrophils, it is also expressed on a subset of eosinophils, differentiating pre-monocytes and plasmacytoid dendritic cells. Ly6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon gamma, and may play a role in the development and maturation of lymphocytes. It is expressed on bone marrow cells, monocytes/macrophages, neutrophils, endothelial cells, and T cell subsets. Expression of Gr-1 in bone marrow correlates with granulocyte differentiation and maturation. However, the physiological role of Ly6G alone remains still unclear. The monoclonal antibody NIMP-R14 has been successfully used to stain polymorphonuclear (PMN) cells and monocytes for fluorescent activated cell sorting and in frozen and paraffin sections. Treatment with antibodies in vivo leads to neutropenia and has inhibitory effect on local immune responses. Furthermore, it has been shown to be useful for depletion of neutrophils in mice. It depletes neutrophils as soon as 6 hours after injection and up to 6 days.

Product Info

Amount :	R14(Discontinued) / 500 µg
Content :	0.5 mg, 0.2 µm filtered protein G purified antibody solution in PBS, containing 0.1% bovine serum albumin. The endotoxin concentration is < 24 EU/mg, determined with HIT302 LAL Assay.
Storage condition :	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.

Application Note

IHC-F: Tissue was fixed with acetone IHC-P: Blocking with 20% normal rabbit serum FACS Analysis: 5 x 10⁵ cells were incubated with 10 µg/ml antibody Functional Studies: Neutrophil depletion. Mice were treated with NIMP-R14 given intraperitoneally at a dose of 1mg, 6h before infection. Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.