Anti-Ly6G/Ly6C [RB6-8C5] VivopureX 5 mg Ab01030-2.0-VXM

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG2a, Kappa
Clone Number: RB6-8C5
Alternative Name(s) of Target: Gr-1; Gr1; Ly-6G; ly-6G.1; ly6C
UniProt Accession Number of Target Protein: P35461
Published Application(s): deplete, WB, FC, IHC
Published Species Reactivity: Mouse
Immunogen: This antibody was raised in Lou-M rats using a popliteal lymph node immunisation and fusion protocol as described by Martiniello et al (1994)
Specificity: This antibody is specific for murine Ly6G, a a 21-25 kDa glycosylphosphatidylinositol (GPI)-linked protein expressed by the myeloid-derived cells in a tightly developmentally-regulated manner in the bone marrow. Monocytes express Ly6G transiently during bone marrow development, while Ly6G expression in granulocytes and peripheral neutrophils directly correlates with the cell's level of differentiation and maturation. This hallmark makes Ly6G a good marker for these particular cell populations. Ly6G has also been implicated in the development of antitumor responses.
Application Notes: This antibody has been used in FACS analyses, immunoprecipitation, immunoblotting, and immunohistochemistry in various studies, such as to elucidate the origin and roles of macrophages in the post-myocardial infarction remodelling (Sager et al, 2016), to investigate the pathogenesis of primary biliary cirrhosis (Yang et al, 2016), to confirm the phenotypic dynamics of microglial and monocyte-derived cells in glioblastoma-bearing mice (Ricard et al, 2016), and to highlight an important ageing-related defect in the mucosal immune system's ability to sample lumenal antigens (Kobayashi et al, 2013). This antibody has also been used in vivo, for example, to deplete Treg cells when delineating the paralleled developments of inflammation and immunosuppression in tumor microenvironment (Yang et al, 2010), or to deplete neutrophils when underpinning a causal role for neutrophils in severe asthma (Wilson et al, 2009).
Antibody First Published in: Stephen Hurst et al. New IL-17 family members promote Th1 or Th2 responses in the lung: in vivo function of the novel cytokine IL-25. J Immunol. 2002 Jul 1;169(1):443-53. PMID:12077275
Note on publication: Describe the use of this antibody for FACS analysis and in vivo cell depletion to demonstrate the function of the novel cytokine IL-25 in the lung.

Product Form

Size: 5 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.
Purification: Protein A affinity purified
Supplied In:

PBS only.
Storage Recommendation: All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions. Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
Concentration: >=1mg (see vial label for exact conc)

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.