Monoclonal Antibody to CD64
Purified Antibody (0.1 mg)

Clone: 10.1  
Isotype: Mouse IgG1  
Specificity: The mouse monoclonal antibody 10.1 recognizes alpha subunit of CD64/FcγRI, a 72 kDa single chain type I glycoprotein, that is expressed on monocytes/macrophages, dendritic cells, and activated granulocytes. HLDA III; WS Code M-250  
Regulatory Status: RUO  
Immunogen: Rheumatoid synovial fluid cells and fibronectin purified human monocytes  
Species Reactivity: Human, Non-Human Primates  
Application: Flow Cytometry  
Recommended dilution: 5 µg/ml  
Immunoprecipitation  
Western Blotting  
Immunohistochemistry (paraffin sections)  
Application note: There can occur problems with paraformaldehyde fixation  
Immunohistochemistry (frozen sections)  
Application note: There can occur problems with paraformaldehyde fixation  
Immunocytochemistry  
Functional Application  
blocking of IgG binding to the FcγRI  
Purity: > 95% (by SDS-PAGE)  
Purification: Purified by protein-A affinity chromatography  
Concentration: 1 mg/ml  
Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4  
Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.  
Expiration: See vial label  
Lot Number: See vial label  
Background: CD64 (FcγRI) is a cell surface receptor for Fc region of IgG. It is composed of specific ligand binding alpha subunit and promiscuous gamma subunit, which is indispensible for tyrosine-based signaling. However, even the alpha subunit can transduce signals leading to cellular effector functions. The isoform FcγRIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include FcγRIb and FcγRIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, FcγRI (a1) can potently enhance MHC class I and II antigen presentation in vitro and in vivo.
References:


*And many other.