

Mouse Anti-CD64/IGFR1 [10.1]: MC0373, MC0373RTU7

Intended Use: For Research Use Only

Description: This antibody recognizes CD64 also known as FcRI. CD64 is a high affinity activatory receptor for IgG2a and a low affinity receptor for IgG2b and IgG3 type antibodies. The interaction between Fc receptors and antibodies play important roles in both the innate and adaptive immune responses. CD64 through binding of the Fc segment of IgG, mediates phagocytosis and plays a role in antibody-dependent cellular cytotoxicity and clearance of immune complexes. In addition, CD64 also functions as an antigen capture for presentation to T-cells and also mediates the release of cytokines and reactive oxygen intermediates including interleukin (IL)-1, IL-6 and tumor necrosis factor (TNF) alpha. It is constitutively expressed on monocytes and macrophages, germinal centre dendritic cells and early myeloid lineage cells, but not lymphocytes. Expression on monocytes can be strongly upregulated by treatment with interferon (IFN) gamma or G-CSF, and can be induced on neutrophils and eosinophils by IFN gamma.

Specifications:

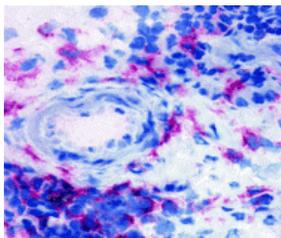
Clone: 10.1
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Immunogen: Rheumatoid synovial fluid cells and fibronectin purified human monocytes
 Localization: Membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
CD64/IGFR1 Concentrated	MC0373	1 ml
CD64/IGFR1 Prediluted	MC0373RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Rectal cancer, esophagus and stomach cancer
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 min @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



Frozen human synovial RA tissue stained with anti-CD64

References:

1. Identification of Receptor Binding to the Biomolecular Corona of Nanoparticles. Lara S, et al. ACS Nano 11:1884-1893, 2017.
2. Multivalent Fc γ -receptor engagement by a hexameric Fc-fusion protein triggers Fc γ -receptor internalisation and modulation of Fc γ -receptor functions. Qureshi OS, et al. Sci Rep 7:17049, 2017.
3. The Fc receptor, FcRI, and other activation molecules on human mononuclear phagocytes after treatment with interferon-gamma. Jayaram Y, et al. Clin Exp Immunol 75:414-20, 1989.

Doc. 100-MC0373
Rev. A