

Rabbit Anti-CD64/IGFR1 Polyclonal: RC0329, RC0329RTU7

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:

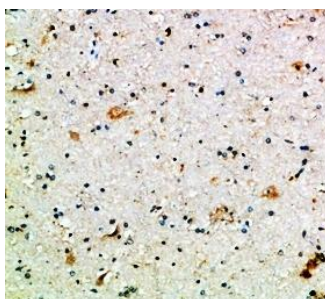
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Synthesized peptide derived from human CD64 protein aa 230-280
 Localization: Membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
CD64/IGFR1 Concentrated	RC0329	1 ml
CD64/IGFR1 Prediluted	RC0329RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Rectal cancer, esophagus and stomach cancer
 Concentrated Dilution: 10-50
 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: Overnight @ 4°C
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human brain stained with anti-CD64 using DAB

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-RC0329
Rev. B