

Anti-FCGR1 [10.1] mAb

Catalogue number: 151026

Sub-type: Primary antibody

Images:

Contributor

Inventor: Nancy Hogg

Institute: Cancer Research UK, Lincoln's Inn Fields Institute

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-FCGR1 [10.1] mAb

Alternate name: Fc Fragment Of IgG Receptor Ia; Fc Gamma Receptor Ia; Fc-Gamma RIA; IGFR1; FCRI; Fc Gamma Receptor; CD64 Antigen; FCGR1; CD64; FCG1

Class: Monoclonal

Conjugate: Unconjugated

Description: Anti-FCGR1 10.1 specifically recognises Fc-gamma receptor 1. This mAb allows investigation of mononuclear phagocyte high affinity receptor, FcRI properties. Anti-FCGR1 can mediate antibody dependant monocyte lysis of tumour cells (or cells expressing the antibody) using host cytotoxic mechanisms or be directed to different types of tumour cells in the form of a heteroantibody, mediating lysis. This monoclonal antibody is directed against an epitope located close to the IgG-binding site of FcRI. This clone (10.1) inhibits binding to mononuclear phagocyte of erythrocytes opsonised with rabbit IgG or human IgG3.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Rheumatoid synovial fluid cells and fibronectin purified human monocytes.

Immunogen UNIPROT ID: P12314

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: Myeloid cell lines U937 and HL60

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Fc-gamma receptor 1 (FCGR1, CD64)

Target alternate names:

Target background: Was created by Nancy Hogg at the London CRUK research institute: Lincoln's Inn Fields, in order to mediate monocyte mediated antibody dependent lysis/death of cells/hybridomas expressing FCGR1 for IgG1. This means that high affinity FcR1 on monocytes can be used as a cytotoxic trigger to destroy targeted tumour cells expressing the antibody or heteroantibodies can be produced and used to target tumour cells which don't express anti-FCGR1. Research Application Many uses across a range of applications, especially immunotherapy and inflammation. Involved in both innate and adaptive immune responses, cytokine production and phagocytosis. Fc-gamma receptor 1 (CD64) is an IgG receptor expressed by monocytes and myeloid cell lines. It is a marker of inflammation. It is involved in cancer and many chronic diseases (arthritis, multiple sclerosis, diabetic ulcers), but also in antibody-dependent cell-mediated cytotoxicity (ADCC), sepsis, automimmune disorders and periodic fever, aphthous stomatitis, pharyngitis, and cervical adenitis (PFAPA) syndrome. The 10.1 antibody blocks the Ig binding to FcR1 receptor.

Molecular weight: 71 kDa

Ic50:

Applications

Application: FACS ; IHC ; IF ; IP ; Fn

Application notes:

Handling

Format: Liquid

Concentration: 0.97 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS containing 0.02% Sodium Azide.

Storage conditions: Store undiluted 2° C to 8° C, do not freeze and protect from prolonged light exposure

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References:

CancerTools.org