

## Monoclonal Antibody to Rat IgG1 (heavy chain) - FITC

Alternate names: Ig gamma-1 chain C region

Catalog No.: SM1030F
Quantity: 0.5 mg
Concentration: 1.0 mg/ml

Background: Immunoglobulin G (IgG), is one of the most abundant proteins in human serum with normal

levels between 8-17 mg/ml in adult blood. IgG is important for our defence against microorganisms and the molecules are produced by B lymphocytes as a part of our adaptive immune response. The IgG molecule has two separate functions; to bind to the pathogen that elicited the response and to recruit other cells and molecules to destroy the antigen. The variability of the IgG pool is generated by somatic recombination and the number of specificities in an individual at a given time point is estimated to be 10e11

variants.

Immunoglobulins, or antibodies, are a complex, heterogeneous mixture of proteins that exhibit two fundamental types of structural variation. Subtle structural differences in their antigen combining sites, or variable regions, account for their unique antigen binding

specificities.

Host / Isotype: Mouse / IgG1 Clone: MARG1.2

Immunogen: Rat IR27 IgG1 myeloma.

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0

myeloma cell line.

Format: State: Liquid purified IgG fraction

**Purification:** Affinity Chromatography

Buffer System: PBS containing 0.09% Sodium Azide and 50% Glycerol

Label: FITC - Fluorescein Isothiocyanate Isomer 1

**Applications:** Flow Cytometry: Use 50  $\mu$ l of 5  $\mu$ g/ml diluted antibody to label 10<sup>6</sup> cells in 100  $\mu$ l.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognizes the gamma 1 heavy chain of Rat immunoglobulin.

Species: Rat.

Other species not tested.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.



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General References: 1. Pelegri, C. et al. (2001) Prevention of adjuvant arthritis by the W3/25 anti-CD4 monoclonal antibody is associated with a decrease of blood CD4+ CD45RC<sup>high</sup> T cells. Clin. Exp. Immunol. 125: 470-477.