

Monoclonal Antibody to Human IgG (Fc) - Purified -

Catalog No.: SM1006P
Quantity: 0.2 mg
Concentration: 1.0 mg/ml
Host / Isotype: Mouse / IgG1
Recommended Isotype Controls: SM10P (for use in human samples), AM03095PU-N

Clone: MK1A6
Immunogen: Human IgG polyclonal
Format: **State:** Liquid purified Ig fraction
Purification: Protein A chromatography
Buffer System: PBS
Preservatives: 0.09% Sodium Azide

Applications: **ELISA:** 1/1,000-1/10,000.
Western Blot.
Immunohistochemistry on Frozen Sections (1/100-1/200). The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. We recommend the use of acetone fixation for frozen sections.
Does not work on paraffin sections.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This Mouse anti Human IgG (Fc) CH2 domain, clone MK 1 A6 recognizes Human IgG Fc (all subclasses).
CH2 and hinge regions have an important role in effector functions of IgG. The epitope detected by clone MK 1 A6 lies within the CH2 domain as determined by haemagglutination and western blotting using IgG heavy chain and myelomas with defined domain deletions.
Species: Human, Rhesus Monkey.
Other species not tested.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: 1. Lund J, Takahashi N, Pound JD, Goodall M, Jefferis R. Multiple interactions of IgG with its core oligosaccharide can modulate recognition by complement and human Fc gamma receptor I and influence the synthesis of its oligosaccharide chains. J Immunol. 1996 Dec 1;157(11):4963-9. PubMed PMID: 8943402.

2. Wozniak-Knopp G, Bartl S, Bauer A, Mostageer M, Woisetschlger M, Antes B, et al. Introducing antigen-binding sites in structural loops of immunoglobulin constant domains: Fc fragments with engineered HER2/neu-binding sites and antibody properties. *Protein Eng Des Sel*. 2010 Apr;23(4):289-97. doi: 10.1093/protein/gzq005. Epub 2010 Feb 11. PubMed PMID: 20150180.
3. Raghuraman S, Park H, Osburn WO, Winkelstein E, Edlin BR, Rehmann B. Spontaneous clearance of chronic hepatitis C virus infection is associated with appearance of neutralizing antibodies and reversal of T-cell exhaustion. *J Infect Dis*. 2012 Mar 1;205(5):763-71. doi: 10.1093/infdis/jir835. Epub 2012 Jan 31. PubMed PMID: 22293431.
4. Hasenhindl C, et al. (2013) Stability assessment on a library scale: a rapid method for the evaluation of the commutability and insertion of residues in C-terminal loops of the CH3 domains of IgG1-Fc. *Protein Engineering, Design and Selection* Sep 4. [Epub ahead of print]
5. Rasti N, Namusoke F, Chne A, Chen Q, Staalsoe T, Klinkert MQ, et al. Nonimmune immunoglobulin binding and multiple adhesion characterize *Plasmodium falciparum*-infected erythrocytes of placental origin. *Proc Natl Acad Sci U S A*. 2006 Sep 12;103(37):13795-800. Epub 2006 Aug 31. PubMed PMID: 16945914.
6. Traxlmayr MW, Lobner E, Hasenhindl C, Stadlmayr G, Oostenbrink C, Rker F, et al. Construction of pH-sensitive Her2-binding IgG1-Fc by directed evolution. *Biotechnol J*. 2014 Aug;9(8):1013-22. doi: 10.1002/biot.201300483. PubMed PMID: 24964247.