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Monoclonal Antibody to IgG (Fc CH2 Domain) - HRP

Catalog No.: SM1006HRP

Quantity: 0.2 mg

Concentration: 1.0 mg/ml

Host / Isotype: Mouse / IgG1

Clone: MK1A6

Immunogen: Human IgG Polyclonal

Format:
State: Liquid purfied Ig fraction
Purification: Affinity Chromatography on Protein A
Buffer System: Phosphate buffered saline pH7.2 with 0.01% Thiomersal
Label: HRP – Horseradish Peroxidase

Applications:
ELISA (1/1,000-1/10,000).
Immunohistochemistry on Frozen Sections (1/100-1/200).
Not suitable for 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, Woisetschläger 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, Rehermann 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, Chêne 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, Rüker 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.