

Monoclonal Antibody to CD14 - FITC

Alternate names:	Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein
Catalog No.:	SM1066F
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	CD14 (also known lipopolysaccharide (LPS) receptor) is expressed strongly on monocytes and macrophage and weakly on the surface of neutrophils. CD14 is anchored to cells by linkage to glycosylphosphatidylinositol (GPI) and functions as a high affinity receptor for complexes of LPS and LPS binding protein (LBP). Soluble CD14, also binding to LPS, acts at physiological concentration as an LPS agonist and has, at higher concentrations, an LPS antagonizing effect in cell activation.
Uniprot ID:	P08571
NCBI:	9606
Host / Isotype:	Mouse / IgG2a
Clone:	Tük4
Immunogen:	CD14 Human
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein G Buffer System: PBS Preservatives: 0.09% Sodium Azide Stabilizers: 1% BSA Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: Use 10 µl of neat-1/10 diluted antibody to label 10 ⁶ cells or 100 µl whole blood. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises the CD14 cell surface antigen. CD14 is expressed strongly by most peripheral blood monocytes and weakly on granulocytes. Clone <i>TÜK4</i> has been shown to block SDF-induced chemotaxis of U937 cells in a dose-dependent manner (6). SM1066LE is recommended for this purpose.
Species Reactivity:	Tested: Human. Expected from sequence similarity: Canine, Goat, Cat, Rabbit, Mink, Bovine, Porcine, Sheep, Cynomolgus Monkey, Llama.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

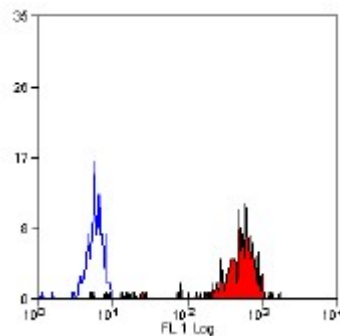
Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

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.

General References:

1. Yoshino, N. et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp. Anim.* 49 (2): 97-110.
2. Jacobsen, C.N. et al. (1993). Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. *Vet. Immunol. Immunopathol.* 39: 461-466.
3. Sopp, P. et al. (1997). Cross-reactivity of monoclonal antibodies to defined human leucocyte differentiation antigens with bovine cells. *Vet. Immunol. Immunopathol.* 56: 11-25.
4. Arriens, M.A. et al. (1996). *Vet. Immunol. Immunopathol.* 54: 113.
5. Willett, B. et al. (2003). Expression of CXCR4 on feline peripheral blood nuclear blood cells: effect of feline immunodeficiency virus. *J. Virol.* 77 (1): 709 - 712.
6. Yang, H. et al. (2003). Antibody to CD14 like CXCR4-specific antibody 12G5 could inhibit CXCR4-dependent chemotaxis and HIV Env-mediated cell fusion. *Immunol. Letters* 88: 27-30.
7. Yoshino, N. et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp. Anim.* 49 (2): 97-110.
8. Jacobsen, C.N. et al. (1993) Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. *Vet. Immunol. Immunopathol.* 39: 461-466.
9. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. *Vet Immunol Immunopathol.* 132:109-15.
10. Dalli, J. et al. (2008) Annexin 1 mediates the rapid anti-inflammatory effects of neutrophil-derived microparticles. *Blood.* 112: 2512-2519.
11. Lybeck, K.R. et al. (2009) Neutralization of interleukin-10 from CD14(+) monocytes enhances gamma interferon production in peripheral blood mononuclear cells from *Mycobacterium avium* subsp. paratuberculosis-infected goats. *Clin. Vaccine. Immunol.* 16: 1003-11.

Pictures:

Staining of human peripheral blood monocytes probed with anti- CD14:FITC (SM1066F)

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