Datasheet: MCA1568F

BATCH NUMBER 174023

Description:	MOUSE ANTI HUMAN CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	TÜK4
Isotype:	IgG2a
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/2

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Dog, Goat, Cat, Rabbit, Mink, Bovine, Pig, Sheep, Cynomolgus monkey, Llama

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
External Database Links	**UniProt:** P08571 Related reagents **Entrez Gene:** 929 CD14 Related reagents
RRID	AB_323712
Specificity	**Mouse anti Human CD14 antibody, clone TÜK4** recognizes the human CD14 cell surface antigen. CD14 is a ~55 kDa glycoprotein that contains multiple leucine-rich repeats. It is anchored to the cell membrane via a glycosylphosphatidylinositol (GPI) linkage (Simmons *et al.* 1989), a soluble form of CD14 also exists (Bazil *et al.* 1986). CD14 is strongly expressed on the surface of monocytes and macrophages but has also been shown to be expressed on the surface of non-myeloid cells (Jersmann 2005). CD14 functions as a pattern recognition receptor (Pugin *et al.* 1994, Dziarski *et al.* 1998) in innate immunity for a variety of ligands, in particular for the LPS (endotoxin) of Gram-negative bacteria. Mouse anti human CD14 antibody, clone TÜK4 has been shown to block SDF-induced chemotaxis of U937 cells in a dose –dependent manner (Yang *et al.* 2003). Use of the anti-human CD14 antibody, Low Endotoxin format is recommended for this purpose.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood
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Further Reading	1. Bazil, V. *et al.* (1986) Biochemical characterization of a soluble form of the 53-kDa monocyte surface antigen. Eur J Immunol. 16:1583-9. 2. Simmons, D. L. *et al.* (1989) Monocyte antigen CD14 is a phospholipid anchored membrane protein. Blood. 73:284-9. 3. Pugin, J. *et al.* (1994) CD14 is a pattern recognition receptor. Immunity.1:509-16. 4. Dziarski, R. *et al.* (1998) Binding of bacterial peptidoglycan to CD14. J Biol Chem. 273:8680-90. 5. Jersmann, H.P. (2005) Time to abandon dogma: CD14 is expressed by non-myeloid lineage cells. Immunol Cell Biol. 83:462-7. 6. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1568F
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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