

Datasheet

CD14 monoclonal antibody, clone biG 7

Catalog Number: MAB5658

Regulation Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against CD14.

Clone Name: biG 7

Immunogen: Monocytes and immunoaffinity purified soluble human CD14.

Host: Mouse

Reactivity: Human

Applications: ELISA, Flow Cyt, WB
(See our web site product page for detailed applications information)

Protocols: See our web site at
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Specificity: biG 7 represents an excellent marker for CD14. CD14 has been shown to be involved in the LPS-induced cell activation. This antigen is present as a membrane bound form and as soluble antigen, both involved in cell stimulation by LPS. The plasma protein LBP plays an important role in this LPS-CD14 mediated cell activation. Monocytes and PMN are activated by the LBP-LPS complex via membrane CD14. The CD14 glycoprotein, gp 55, is present on most monocytic and macrophages like cell types: monocytes, macrophages, Kupffer cells, pleural phagocytic cells and dendritic reticular cells. CD14 is also observed on granulocytes and activated or transformed B-cells. Furthermore CD14 is present in a soluble form in human serum, urine and other body fluids. The CD14 molecule has been reported to be a receptor for Endotoxin.

Form: Lyophilized

Isotype: IgG1

Recommend Usage: ELISA (1:10000)

The optimal working dilution should be determined by the end user.

Storage Buffer: Lyophilized from PBS

Storage Instruction: Store at -20°C on dry atmosphere. After reconstitution with deionized water, store at -20°C or lower.
Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 929

Gene Symbol: CD14

Gene Alias: -

Gene Summary: CD14 is a surface protein preferentially expressed on monocytes/macrophages. It binds lipopolysaccharide binding protein and recently has been shown to bind apoptotic cells. Alternative splicing results in multiple transcript variants encoding the same isoform. [provided by RefSeq]

References:

1. Mutation of amino acids 39-44 of human CD14 abrogates binding of lipopolysaccharide and Escherichia coli. Stelter F, Bernheiden M, Menzel R, Jack RS, Witt S, Fan X, Pfister M, Schutt C. Eur J Biochem. 1997 Jan 15;243(1-2):100-9.
2. The myeloid differentiation antigen CD14 is N- and O-glycosylated. Contribution of N-linked glycosylation to different soluble CD14 isoforms. Stelter F, Pfister M, Bernheiden M, Jack RS, Bufler P, Engelmann H, Schutt C. Eur J Biochem. 1996 Mar 1;236(2):457-64.