**BACKGROUND**

Lipopolysaccharide (LPS) elicits the secretion of mediators and cytokines produced by activated macrophages and monocytes. CD14 is a glycosylphosphatidylinositol (GPI)-anchored protein found on the surfaces of monocytes and polymorphonuclear leukocytes. CD14 functions as a receptor for LPS, resulting in the secretion of various proteins. An important component in the LPS activation of monocytes through the CD14 receptor is the “adapter molecule” lipopolysaccharide binding protein (LBP). There are two forms of CD14, a membrane-associated form (mCD14), and a soluble form (sCD14). mCD14 responds to LPS alone and facilitates the secretion of proteins, while cells not expressing mCD14 fail to respond to LPS. The cells that lack mCD14 respond to LPS/LBP in the presence of sCD14.

**CHROMOSOMAL LOCATION**

Genetic locus: CD14 (human) mapping to 5q31.3.

**SOURCE**

CD14 (TUK4) is a mouse monoclonal antibody raised against tumor cells from a patient suffering leukemia.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD14 (TUK4) is available conjugated to either phycoerythrin (sc-19588 PE) or fluorescein (sc-19588 FITC), 200 µg/ml, for WB (RGB), IF, IHC (P) and FCM.

**APPLICATIONS**

CD14 (TUK4) is recommended for detection of CD14 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

CD14 (TUK4) is also recommended for detection of CD14 in additional species, including bovine, porcine and canine.

Suitable for use as control antibody for CD14 siRNA (h): sc-29248, CD14 shRNA Plasmid (h): sc-29248-SH and CD14 shRNA (h) Lentiviral Particles: sc-29248-V.

Molecular Weight of CD14: 53-55 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, CCRF-CEM cell lysate: sc-2225 or THP-1 cell lysate: sc-2238.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

- Immunofluorescence: use m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

![CD14 (TUK4) PE: sc-19588 PE. FCM analysis of THP-1 cells. Black line histogram represents the isotype control, normal mouse IgG2a PE: sc-2867.]

![CD14 (TUK4) FITC: sc-19588 FITC. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG2a FITC: sc-2865.]

**SELECT PRODUCT CITATIONS**


See **CD14 (5A3B11B5): sc-58951** for CD14 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.