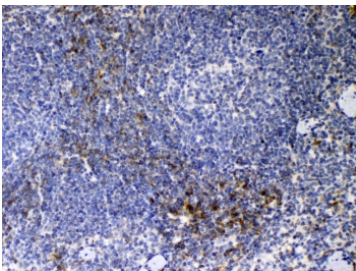


Cd14 Antibody (R32821)

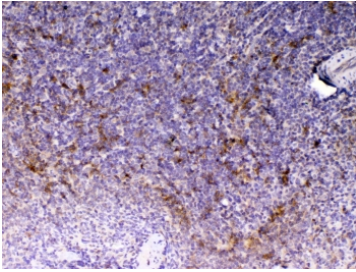
Catalog No.	Formulation	Size
R32821	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

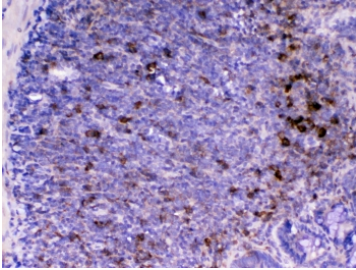
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P10810
Localization	Cell surface, Secreted, Cytoplasmic (Golgi)
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Cd14 antibody is available for research use only.



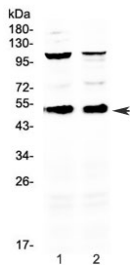
Immunohistochemistry analysis of Cd14 antibody in mouse spleen tissue. Formalin-fixed, paraffin-embedded mouse spleen tissue was stained using Cd14 antibody at a concentration of 1 ug per mL. Heat-induced epitope retrieval was performed by steaming tissue sections in citrate buffer, pH 6.0, for 20 minutes, followed by cooling prior to antibody incubation. Brown chromogenic signal is observed in scattered immune cells within splenic red pulp and perifollicular regions, consistent with Cd14-positive myeloid cell populations, while the majority of lymphoid cells in white pulp areas show little to no staining. This staining pattern reflects myeloid lineage-associated expression of Cd14 in mouse spleen tissue.



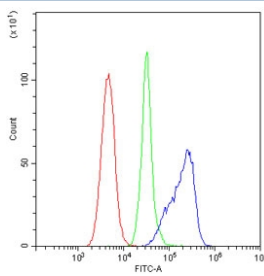
IHC testing of FFPE rat spleen tissue with Cd14 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat lymph tissue with Cd14 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



Western blot testing of 1) mouse thymus and 2) mouse spleen with Cd14 antibody at 0.5ug/ml. Predicted molecular weight ~40 kDa (unmodified) and 50-55 kDa (glycosylated).



Flow cytometry testing of mouse PBM cells with Cd14 antibody at 1ug/10⁶ cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Cd14 antibody.

Description

Cd14 antibody recognizes CD14, also known as cluster of differentiation 14, a glycosylphosphatidylinositol-anchored cell surface protein that functions as a key pattern recognition receptor in the innate immune system. CD14 is primarily expressed on monocytes, macrophages, and related myeloid cell populations, where it plays a central role in detecting bacterial components and initiating inflammatory signaling. Cd14 antibody is widely referenced in immunology and pathology literature and is commonly described as CD14 antibody or monocyte differentiation antigen CD14 antibody.

CD14 acts as a co-receptor for the recognition of lipopolysaccharide and other pathogen-associated molecular patterns, functioning together with Toll-like receptors and accessory proteins to amplify innate immune responses. Upon ligand engagement, CD14 facilitates downstream signaling events that lead to cytokine production, immune cell activation, and coordination of host defense mechanisms. In tissue sections, CD14 expression is typically associated with monocytes, macrophages, tissue-resident macrophage subsets, and infiltrating inflammatory cells, making Cd14 antibody useful for identifying cells of the monocyte-macrophage lineage.

Alterations in CD14 expression have been reported in a variety of pathological contexts. Increased numbers of CD14-positive cells are commonly observed in inflammatory lesions, infectious diseases, autoimmune conditions, and tumor-associated immune infiltrates. In cancer research, CD14-expressing myeloid cells are frequently examined as

components of the tumor microenvironment, where they may contribute to immune modulation, inflammation, and tissue remodeling. As a result, CD14 antibody staining patterns are often evaluated in studies focused on innate immunity, inflammation, and immune cell composition within tissues.

At the cellular level, CD14 contributes to innate immune sensing and regulation of inflammatory responses rather than direct antigen presentation. Its restricted expression to myeloid lineages makes Cd14 antibody a valuable tool for distinguishing monocytes and macrophages from lymphoid or non-hematopoietic cell populations. The Cd14 antibody is designed to detect CD14 expression in research applications where characterization of innate immune cells and inflammatory responses is required.

Application Notes

Optimal dilution of the Cd14 antibody should be determined by the researcher.

Immunogen

A recombinant mouse protein corresponding to amino acids S16-A260 was used as the immunogen for the Cd14 antibody.

Storage

After reconstitution, the Cd14 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.