

## Purified Anti-Human CD14 Antibody[M5E2], Functional Grade

catalog number: E-AB-F12090

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

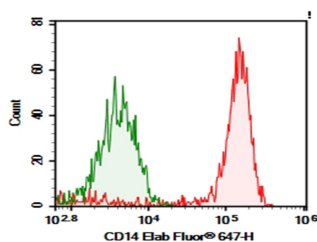
|                     |   |
|---------------------|---|
| <b>Reactivity</b>   | Human   |
| <b>Immunogen</b>    | Recombinant Human CD14 protein  |
| <b>Host</b>         | Mouse   |
| <b>Isotype</b>      | Mouse IgG2a, $\kappa$   |
| <b>Clone</b>        | M5E2  |
| <b>Purification</b> | >98%, Protein A/G purified  |
| <b>Buffer</b>       | Sterile PBS, pH 7.2. < 1.0 EU per mg of the antibody as determined by the LAL method. |

### Applications

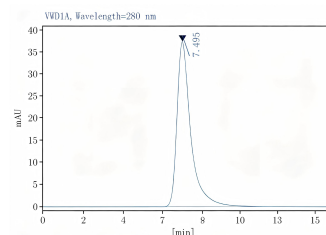
### Recommended Dilution

|              |  |
|--------------|--|
| <b>FCM</b>   | 2 $\mu$ g/mL (0.5 $\times$ 10 <sup>6</sup> - 1 $\times$ 10 <sup>6</sup> cells) |
| <b>Block</b> | Reported in the literature   |

### Data



Human peripheral blood monocytes were stained with 0.2 $\mu$ g Purified Anti-Human CD14 Antibody[M5E2], Functional Grade (Right) and 0.2 $\mu$ g mouse IgG2a, $\kappa$  Isotype Control (Left), followed by Elab Fluor® 647-conjugated goat Anti-mouse IgG Secondary Antibody, then anti-human CD33 PE-conjugated Monoclonal Antibody.



Monomer purity  $\geq$ 95% as determined by analytical size-exclusion chromatography (SEC)

### Preparation & Storage

|                 |  |
|-----------------|--|
| <b>Storage</b>  | Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles. This preparation contains no preservatives, thus it should be handled under aseptic conditions. |
| <b>Shipping</b> | Ice bag  |

### Background

#### For Research Use Only

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 14 (CD14) is a member of the CD system. It takes its name from its inclusion in the CD molecule surface marker proteins. CD14 exists in two forms: a form anchored into the membrane or a soluble form. CD14 was found expressed in macrophages, neutrophil granulocyte and dendritic cells. The major function is to serve as a co-receptor (along with TLR4 and MD-2) for the bacterial lipopolysaccharide (LPS) and other pathogen-associated molecular patterns.

None (Azide-Free, Low Endotoxin) are perfectly suited to be used in culture or in vivo (for nonhuman studies) for functional assays blocking, neutralizing, activation or depletion where the presence of azide may damage cells or exogenous endotoxin may signal or activate cells.

## Application References

Power CP, et al. J Immunol. 2004 Sep;173(5):5229-35.