

**XFD488 Anti-human CD14 Antibody \*HI221\***

Catalog Number: 10140150, 10140151

Unit Size: 100 tests, 500 tests

**Product Details**

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Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

**Antibody Properties**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgM
Immunogen	CD14 (LPS-Receptor)
Clone	HI221
Conjugate	AF488

**Biological Properties**

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Appearance	Orange liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. <i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

**Spectral Properties**

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Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

## Applications

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HI221 is an anti-human monoclonal antibody that is specific for the CD14 antigen. CD14 (sometimes referred to as myeloid cell-specific leucine-rich glycoprotein or LPS receptor) is a glycoprotein that is found on the surface of cells like granulocytes and macrophages. CD14 plays a role in vital cellular pathways, namely, the apoptotic signaling pathway, lipopolysaccharide-mediated signaling pathway and cell surface receptor signaling pathway. In addition, in many organisms, it enhances interleukin-8 secretion, acts to positively regulate interferon-gamma production and positively regulates NIK/NF-kappaB signaling. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands such as Endotoxin and TLR4. CD14 is a very popular antibody target, with over 42000 publications in the last decade. CD14 has a variety of applications in neuroinflammation, neuroscience and cell biology research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 488 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 488 nm laser and 530/30 nm bandpass filter (for example, as in the BD FACSAria™ III).