XFD555 Anti-human CD114 Antibody *LMM741*

Catalog Number: 11140150, 11140151
Unit Size: 100 tests, 500 tests

Product Details

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

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1 kappa
Immunogen	CD114 (CSF3R, GCSFR)
Clone	LMM741
Conjugate	AF555

Biological Properties

Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF555 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. **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.*

Spectral Properties

Conjugate	AF555
Excitation Wavelength	553 nm
Emission Wavelength	568 nm

Applications

The LMM741 monoclonal antibody binds to human CD114, a 130 kD single-pass type I membrane protein typically found on the surface of endothelial cells, platelets, myeloid progenitor cells, neutrophils and granulocytes. CD114 acts in key cellular pathways, in particular, the cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands such as jak2, jak1 and G-CSF. CD114 is a relatively rare antibody target, with fewer than 100 publications in the last decade. Even still, CD114 is essential for immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 555 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 582/15 nm bandpass filter (for example, as in the BD FACSAria™ III).