

## XFD555 Anti-human CD58 Antibody \*HI58a\*

Catalog Number: 10580160, 10580161

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 IgG1
Immunogen	CD58 (LFA-3)
Clone	HI58a
Conjugate	AF555

### Biological Properties

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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. <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	AF555
Excitation Wavelength	553 nm
Emission Wavelength	568 nm

## Applications

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HI58a is an anti-human monoclonal antibody that targets the CD58 antigen. CD58 (sometimes referred to as Lymphocyte function-associated antigen 3, LFA3 or LFA-3) is a 45 - 70 kD transmembrane protein that is located on the surface of cells such as macrophages, NK cells, dendritic cells, B cells and granulocytes. CD58 has been associated with key biological processes such as cell-cell adhesion, especially heterotypic cell-cell adhesion. Also, in certain organisms, it is involved in the positive regulation of interleukin-8 secretion. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like CD2 and LFA-2. CD58 is a relatively rare antibody target, with less than 1000 publications in the last decade. Even still, CD58 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell biology. 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™ Fusion).