

## XFD647 Anti-human CD1 Antibody \*HI149\*

Catalog Number: 10010170, 10010171

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	CD1a (R4, T6)
Clone	HI149
Conjugate	AF647

### Biological Properties

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Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF647 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 AF647

Excitation Wavelength 650 nm

Emission Wavelength 671 nm

## Applications

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HI149 is an anti-human monoclonal antibody that forms an immune complex with the CD1a antigen. CD1a (sometimes called R4 or T6) is a 49 kD member of the Ig superfamily that is found on the surface of cells like macrophages, dendritic cells and T cells. In certain organisms, CD1 is involved in the positive regulation of T cell mediated cytotoxicity, and is associated with a variety of biologically interesting macromolecules/ligands, namely,  $\beta$ -2-Microglobulin. CD1 is a moderately popular antibody target, with over 15000 publications in the last decade. CD1a is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology. This antibody was purified through affinity chromatography and conjugated to XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 647 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 664/20 nm bandpass filter (for example, as in the Luminex Guava easyCyte).