

## PE/XFD700 Anti-human CD1 Antibody \*HI149\*

Catalog Number: 100101O0,  
100101O1, 100101O2  
Unit Size: 25 tests, 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          | PE/AF700      |

### Biological Properties

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| Preparation           | Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions                                                                                                                                    |
| Application           | Flow Cytometry (FACS)                                                                                                                                                                                                                      |
| 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 | PE/AF700 |
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Excitation Wavelength 565 nm

Emission Wavelength 721 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 PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 697/58 nm bandpass filter (for example, as in the BD FACSMelody™).