

## XFD750 Anti-human CD5 Antibody \*HISM2\*

Catalog Number: 100501B0,

100501B1

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          | CD5 (Leu1, Ly-1, T1, Tp67) |
| Clone              | HISM2                      |
| Conjugate          | AF750                      |

### Biological Properties

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|                       |  |
|-----------------------|--|
| Appearance            | Dark blue liquid   |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF750 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             | AF750  |
| Excitation Wavelength | 752 nm |
| Emission Wavelength   | 776 nm |

## Applications

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HISM2 is an anti-human monoclonal antibody that forms an immune complex with the CD5 antigen. CD5 (sometimes referred to as LEU1, Tp67 or L $\gamma$ t-1) is a 67 kD single-pass type I membrane protein that is located on the surface of cells like B cells and T cells. CD5 is a component of vital cellular pathways, for instance, the apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like ZAP-70, TCR and BCR. CD5 is a moderately popular antibody target, with over 11000 publications in the last decade. CD5 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of costimulatory molecules. This antibody was purified through affinity chromatography and conjugated to XFD750 (ex/em = 752/776 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).