

**XFD555 Anti-human CD97 Antibody \*MEM-180\***

Catalog Number: 10970160, 10970161

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          | CD97 (BL-KDDF12) |
| Clone              | MEM-180          |
| 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.<br><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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The MEM-180 monoclonal antibody binds with human CD97, a 74 kD multi-pass membrane protein typically expressed on the surface of macrophages, dendritic cells, granulocytes and monocytes. CD97 is involved with essential cellular pathways, namely, the G protein-coupled receptor signaling pathway and cell surface receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as CD55 (DAF). CD97 is a relatively rare antibody target, with fewer than 600 publications in the last decade. Even still, CD97 is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology. 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 577/35 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).