

**XFD488 Anti-human CD9 Antibody \*HI9a\***

Catalog Number: 10090150, 10090151

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          | CD9 (MRP-1, P24) |
| Clone              | HI9a             |
| Conjugate          | AF488            |

**Biological Properties**

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|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance            | Orange liquid                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF488 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             | AF488  |
| Excitation Wavelength | 499 nm |
| Emission Wavelength   | 520 nm |

## Applications

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HI9a is an anti-human monoclonal antibody that recognizes the CD9 antigen. CD9 (alternatively called MIC3, TSPAN29, Tetraspanin or 5H9 antigen) is a 24 kD member of the Tetraspan family that is expressed on the surface of cells like macrophages, granulocytes, epithelial cells, platelets and endothelial cells. In many organisms, CD9 is involved in the negative regulation of cellular component movement, represses cell population proliferation and negatively regulates platelet aggregation. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as Integrin  $\beta 1$ . CD9 is a fairly uncommon antibody target, with a little more than 6100 publications in the last decade. Even still, CD9 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology and stem cells. This antibody was purified through affinity chromatography and conjugated to XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 488 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 488 nm laser and 515/20 nm bandpass filter (for example, as in the BD FACSymphony™ A5).