

**XFD700 Anti-human CD2 Antibody \*HIT11\***

Catalog Number: 100201A0, 100201A1

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	CD2 (LFA-2, Erythrocyte R, T11)
Clone	HIT11
Conjugate	AF700

**Biological Properties**

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Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 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	AF700
Excitation Wavelength	696 nm
Emission Wavelength	719 nm

## Applications

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HIT11 is an anti-human monoclonal antibody that recognizes the CD2 antigen. CD2 (sometimes referred to as LFA-2) is a 45 kD single-pass type I membrane protein that is found on the surface of cells like T cells. CD2 has been thought to be involved with key biological processes such as cell-cell adhesion, especially heterotypic cell-cell adhesion. Also, in some organisms, it enhances myeloid dendritic cell activation, acts to positively regulate interferon-gamma secretion and is an enhancer of tumor necrosis factor production. CD2 is involved with key cellular pathways, for instance, the cell surface receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as LFA-3, CD59, CD58 and CD48. CD2 is a moderately popular antibody target, with over 16000 publications in the last decade. CD2 is often 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 XFD700 (ex/em = 696/719 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).