

**XFD647 Anti-human CD2 Antibody \*HIT11,  
XFD647 Same Structure to Alexa Fluor™  
647\***Catalog number: 10020180, 10020181  
Unit size: 100 tests, 500 tests**Product Details**

---

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

**Antibody Properties**

---

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD2 (LFA-2, Erythrocyte R, T11)
Clone	HIT11
Conjugate	AF647

**Biological Properties**

---

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

---

Conjugate	AF647
Excitation Wavelength	650 nm
Emission Wavelength	671 nm

**Applications**

---

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 XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 647 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).