

**XFD647 Anti-human CD6 Antibody *HI210,
XFD647 Same Structure to Alexa Fluor™
647***Catalog number: 10060180, 10060181
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	CD6 (T12, TP120)
Clone	HI210
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

HI210 is an anti-human monoclonal antibody that is specific for the CD6 antigen. CD6 (sometimes called TP120, OX52 or T12) is a 100 - 130 kD single-pass type I membrane protein that is located on the surface of cells such as T cells and B cells. In some organisms, CD6 acts to positively

regulate T cell proliferation and enhances cytokine production involved in inflammatory response. Additionally, it acts in critical cellular pathways, in particular, the lipopolysaccharide-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as CD166 (ALCAM), gp40 and gp90. CD6 is a fairly uncommon antibody target, with a little more than 1200 publications in the last decade. Even still, CD6 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically 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 ImageStream).