

## XFD488 Anti-human CD6 Antibody \*HI210\*

Catalog Number: 10060150, 10060151

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	CD6 (T12, TP120)
Clone	HI210
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. <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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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 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 530/30 nm bandpass filter (for example, as in the BD FACSAria™ Fusion).