

## PE/XFD610 Anti-human CD6 Antibody \*HI210\*

Catalog Number: 100601O0,  
100601O1, 100601O2  
Unit Size: 25 tests, 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	PE/AF610

### Biological Properties

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Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions
Application	Flow Cytometry (FACS)
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	PE/AF610
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Excitation Wavelength 565 nm

Emission Wavelength 627 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 PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 613/18 nm bandpass filter (for example, as in the BD FACSMelody™).