

## APC/XFD750 Anti-human CD34 Antibody \*4H11\*

Catalog Number: 103401E0,  
103401E1, 103401E2  
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	CD34 (Gp105-120)
Clone	4H11
Conjugate	APC/AF750

### Biological Properties

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Preparation	Antibody purified by affinity chromatography and then conjugated with APC/AF750 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	APC/AF750
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Excitation Wavelength 651 nm

Emission Wavelength 785 nm

## Applications

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4H11 is an anti-human monoclonal antibody that recognizes the CD34 antigen. CD34 (sometimes called Gp105-120) is a 105 - 120 kD glycoprotein that is located on the surface of cells like endothelial cells and stem cells. In many organisms, CD34 plays a role in the downregulation of tumor necrosis factor production, positively regulates granulocyte colony-stimulating factor production and is involved in the positive regulation of vasculogenesis. Also, it has been associated with vital biological processes such as endothelium development, especially glomerular endothelium development. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands like MadCAM-1, CRKL and L-Selectin. CD34 is a very popular antibody target, with over 55000 publications in the last decade. CD34 is vital to neuroscience, neuroinflammation and immunology research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to APC/XFD750 (ex/em = 756/785 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).