

XFD700 Anti-human CD34 Antibody *4H11*

Catalog Number: 103401A0, 103401A1

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	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

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD34 (Gp105-120)
Clone	4H11
Conjugate	AF700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 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

Conjugate	AF700
Excitation Wavelength	696 nm
Emission Wavelength	719 nm

Applications

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 XFD700 (ex/em = 696/719 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher).