

XFD488 Anti-human CD135 Antibody *BV10A4*

Catalog Number: 11350140, 11350141

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	CD135 (FLT3, FLK2, STK-1)
Clone	BV10A4
Conjugate	AF488

Biological Properties

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

Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

BV10A4 is an anti-human monoclonal antibody that forms an immune complex with the CD135 antigen. CD135 (also known as FLT3, FLK2 or STK-1) is a 130 - 160 kD member of the immunoglobulin supergene family that is located on the surface of cells like stem cells. CD135 acts in important cellular pathways, in particular, the transmembrane receptor protein tyrosine kinase signaling pathway and cytokine-mediated signaling pathway. Also, in certain organisms, it positively regulates tyrosine phosphorylation of STAT protein, positively regulates phosphatidylinositol 3-kinase activity and is a promoter of phosphatidylinositol 3-kinase signaling. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like FL (flt3 ligand). CD135 is a relatively rare antibody target, with fewer than 900 publications in the last decade. Even still, CD135 has a variety of applications in immunology and cell biology research, frequently serving as a phenotypic marker for differentiating cell types in flow cytometric applications. 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 LSRFortessa™ Cell Analyzer).