

XFD680 Anti-human CD44 Antibody *AHC0056*

Catalog Number: 10442180, 10442181

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	IgG2a
Immunogen	CD44 (ECMR-III, Pgp-1, HUTCH-1, H-CAM)
Clone	AHC0056
Conjugate	AF680

Biological Properties

Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 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	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 nm

Applications

AHC0056 is an anti-human monoclonal antibody that forms an immune complex with the CD44 antigen. CD44 (also known as Ly-24) is a 85 kD transmembrane protein that is expressed on the surface of cells like B cells, NK cells and T cells. CD44 plays a role in important cellular pathways, in particular, the negative regulation of intrinsic apoptotic signaling pathway in response to DNA damage by p53 class mediator and interferon-gamma-mediated signaling pathway. Additionally, in some organisms, it is an enhancer of ERK1 and ERK2 cascade, acts to negatively regulate apoptotic process and is an enhancer of peptidyl-tyrosine phosphorylation. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands like MIP1 β . CD44 is a very popular antibody target, with over 45000 publications in the last decade. CD44 has a variety of applications in cell biology and cell adhesion research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 680 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 664/20 nm bandpass filter (for example, as in the Luminex Guava easyCyte).