

PE/XFD700 Anti-human/ dog CD132 Antibody *TUGh4*

Catalog Number: 113201O0,
113201O1, 113201O2
Unit Size: 25 tests, 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, dog
Class	Primary
Clonality	Monoclonal
Host	Rat
Isotype	Rat IgG2b kappa
Immunogen	CD132 (Common γ chain)
Clone	TUGh4
Conjugate	PE/AF700

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 μ L/million cells in 100 μ L 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	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 nm

Applications

The TUGh4 monoclonal antibody binds to human/ dog CD132, a 64 - 70 kD member of the Ig superfamily frequently located on the surface of macrophages and B cells. CD132 is a component of important cellular pathways, namely, the interleukin-21-mediated signaling pathway, interleukin-9-mediated signaling pathway and interleukin-2-mediated signaling pathway. In addition, in certain organisms, it is an enhancer of phagocytosis. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as CD124, JAK1, CD25 and Ick. CD132 is a relatively rare antibody target, with fewer than 800 publications in the last decade. Even still, CD132 has a variety of applications in immunology 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 PE/XFD700 (ex/em = 566/721 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). It is compatible with the 561 nm laser and 710/50 nm bandpass filter (for example, as in the BD FACSAria™ III).