

XFD647 Anti-human/ dog CD132 Antibody *TUGh4*

Catalog Number: 11320170, 11320171

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, dog
Class	Primary
Clonality	Monoclonal
Host	Rat
Isotype	Rat IgG2b kappa
Immunogen	CD132 (Common γ chain)
Clone	TUGh4
Conjugate	AF647

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
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	AF647
Excitation Wavelength	650 nm
Emission Wavelength	671 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 XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 647 (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).