

## XFD594 Anti-human/ dog CD132 Antibody \*TUGh4\*

Catalog Number: 11320160, 11320161

Unit Size: 100 tests, 500 tests

### Product Details

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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

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Species Reactivity	Human, dog
Class	Primary
Clonality	Monoclonal
Host	Rat
Isotype	Rat IgG2b kappa
Immunogen	CD132 (Common $\gamma$ chain)
Clone	TUGh4
Conjugate	AF594

### Biological Properties

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Appearance	Purple liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF594 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 $\mu$ L/million cells in 100 $\mu$ 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

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Conjugate AF594

Excitation Wavelength 590 nm

Emission Wavelength 618 nm

## Applications

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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 lck. 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 XFD594 (ex/em = 590/618 nm). XFD594 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 594 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).