

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

Catalog Number: 113201O0,

113201O1, 113201O2

Unit Size: 25 tests, 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 γ chain) |
| Clone | TUGh4 |
| Conjugate | PE/AF700 |

Biological Properties

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| 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 user titrates the product for use in their tests using proper positive and negative controls.</i> |

Spectral Properties

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| 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).