

**XFD555 Anti-human/ dog CD132 Antibody \*TUGh4\***

Catalog Number: 11320150, 11320151

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 $\gamma$ chain) |
| Clone              | TUGh4                         |
| Conjugate          | AF555                         |

**Biological Properties**

---

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance            | Red liquid                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF555 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.<br><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             | AF555  |
| Excitation Wavelength | 553 nm |
| Emission Wavelength   | 568 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 XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 555 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 583/24 nm bandpass filter (for example, as in the Luminex Amnis CellStream).