

## XFD647 Anti-human CD200 Antibody \*OX-104\*

Catalog Number: 12000180, 12000181

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
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1, $\kappa$
Immunogen	CD200 (OX-2)
Clone	OX-104
Conjugate	AF647

### Biological Properties

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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 $\mu$ 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 AF647  
Excitation Wavelength 650 nm  
Emission Wavelength 671 nm

## Applications

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OX-104 is an anti-human monoclonal antibody that forms an immune complex with the CD200 antigen. CD200 (sometimes referred to as OX-2 or OX2) is a single-pass type I membrane protein that is expressed on the surface of cells like stem cells, dendritic cells, B cells and endothelial cells. CD200 has been thought to be involved with vital biological processes such as cell-cell adhesion, especially heterotypic cell-cell adhesion. In addition, in many organisms, it suppresses neuron death, is a negative regulator of macrophage activation and is a negative regulator of interleukin-6 secretion. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as CD200R1. CD200 is a fairly uncommon antibody target, with a little more than 2000 publications in the last decade. Even still, CD200 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of neuroscience and immunology. 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).