

## XFD488 Anti-human/ rabbit/ cat/ non-human primates/ ferret CD271 Antibody \*NGFR5\*

Catalog Number: 12710150, 12710151

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, rabbit, cat, non-human primates, ferret
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD271 (p75NTR, TNFRSF16, NGFR, Gp80-LNGFR)
Clone	NGFR5
Conjugate	AF488

### Biological Properties

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Appearance	Orange liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL 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	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

## Applications

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NGFR5 is an anti-human/ rabbit/ cat/ non-human primates/ ferret monoclonal antibody that is specific for the CD271 antigen. CD271 (sometimes referred to as TNFRSF16 or Gp80-LNGFR) is a 75 kD transmembrane protein that is found on the surface of cells like dendritic cells. CD271 is a component of important cellular pathways, namely, the neurotrophin TRK receptor signaling pathway, negative regulation of fibroblast growth factor receptor signaling pathway and positive regulation of apoptotic signaling pathway. Also, it has been associated with critical biological processes like glucose homeostasis, especially cellular glucose homeostasis. In certain organisms, CD271 plays a role in the upregulation of pri-miRNA transcription by RNA polymerase II, positively regulates apoptotic process and is a negative regulator of hair follicle development. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like NT-3 and NT-4. CD271 is a fairly uncommon antibody target, with a little more than 1700 publications in the last decade. Even still, CD271 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of stem cells, immunology and neuroscience. This antibody was purified through affinity chromatography and conjugated to XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 488 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 488 nm laser and 515/20 nm bandpass filter (for example, as in the BD FACSymphony™ A5).