

XFD594 Anti-human CD340 Antibody *24D2*

Catalog Number: 13400170, 13400171

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
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD340 (ERBB2, HER-2)
Clone	24D2
Conjugate	AF594

Biological Properties

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 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

Conjugate	AF594
Excitation Wavelength	590 nm
Emission Wavelength	618 nm

Applications

24D2 is an anti-human monoclonal antibody that targets the CD340 antigen. CD340 (alternatively called ERBB2 or HER-2) is a 185 kD transmembrane glycoprotein that is found on the surface of cells such as epithelial cells. CD340 has been closely linked to key biological processes like signal transduction, especially intracellular signal transduction. Furthermore, in certain organisms, it is an enhancer of cell growth, is an enhancer of GTPase activity and plays a role in the upregulation of translation. CD340 is a member of important cellular pathways, for example, the cell surface receptor signaling pathway, transmembrane receptor protein tyrosine kinase signaling pathway and negative regulation of ERBB signaling pathway. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands such as EGFR. CD340 is a relatively rare antibody target, with fewer than 100 publications in the last decade. Even still, CD340 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of synaptic biology and immunology. 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).