

PE/XFD700 Anti-human CD28 Antibody *9.3*

Catalog Number: 102811Q0,
102811Q1, 102811Q2
Unit Size: 25 tests, 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 IgG2a
Immunogen	CD28 (Tp44, T44)
Clone	9.3
Conjugate	PE/AF700

Biological Properties

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

Spectral Properties

Conjugate	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 nm

Applications

The 9.3 monoclonal antibody binds with human CD28, a 44 kD transmembrane glycoprotein typically located on the surface of natural killer cells and plasma cells. CD28 is a member of vital cellular pathways, namely, the cell surface receptor signaling pathway, apoptotic signaling pathway and T cell receptor signaling pathway. Also, in some organisms, it is involved in the positive regulation of interleukin-4 production, is involved in the positive regulation of inflammatory response to antigenic stimulus and promotes isotype switching to IgG isotypes. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as PI3-kinase, CD86 and CD80. CD28 is a very popular antibody target, with over 30000 publications in the last decade. CD28 is vital to costimulatory molecules research, typically 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 695/40 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).