

**XFD700 Anti-human CD28 Antibody**  
**\*CD28.2, XFD700 Same Structure to Alexa**  
**Fluor™ 700\***

Catalog number: 102801A0, 102801A1  
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	0.1 mg/mL
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
Immunogen	CD28 (Tp44, T44)
Clone	CD28.2
Conjugate	AF700

### Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

### Spectral Properties

Conjugate	AF700
Excitation Wavelength	696 nm
Emission Wavelength	719 nm

### Applications

CD28.2 is an anti-human monoclonal antibody that forms an immune complex with the CD28 antigen. CD28 (sometimes called T44) is a 44 kD member of the Ig superfamily that is located on the surface of cells such as T cells. CD28 acts in essential cellular pathways, in particular, the cell surface receptor signaling pathway, T cell receptor signaling pathway and apoptotic signaling pathway. Furthermore, in some organisms, it positively regulates isotype switching to IgG isotypes, is an enhancer of interleukin-4 production and upregulates translation. From a research

standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as PI3-kinase, CD80 and CD86. CD28 is a very popular antibody target, with over 30000 publications in the last decade. CD28 is essential for costimulatory molecules and immunology 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 XFD700 (ex/em = 696/719 nm). XFD700 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 700 (Alexa Fluor® is the trademark of ThermoFisher).