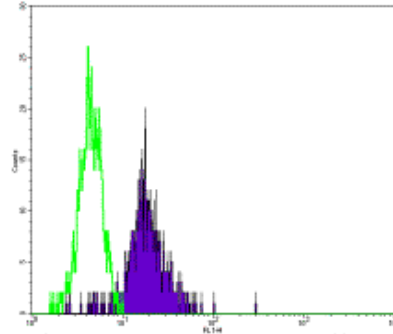


## Product Information

Contents: Affinity Purified anti-human CD86 (B7-2)  
Catalog Number: 14-0869  
Sizes: 25 ug, 100 ug  
Formulation: Phosphate buffer pH 7.2,  
150 mM NaCl, 0.09% NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
Avoid repeated freeze/thaw cycles.  
Clone: IT2.2  
Isotype: Mouse IgG2b, κ  
HLDA No.: VI B-CD86.8



Normal human peripheral blood stained with Purified IT2.2 and detected with FITC anti-mouse IgG (cat.no. 11-4011). Cells in the monocyte gate were analyzed.

### Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-0869	PE anti-human CD86 (B7-2)	488	575	FC
13-0869	Biotin anti-human CD86 (B7-2)	N/A	N/A	FC
14-0869	Affinity Purified anti-human CD86 (B7-2)	N/A	N/A	FA FC
15-0869	PE-Cy5 anti-human CD86 (B7-2)	488	670	FC
16-0869	Functional Grade* Purified anti-human CD86 (B7-2)	N/A	N/A	FA FC

\*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.  
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

## Description

The IT2.2 monoclonal antibody reacts with human CD86, an ~80 kDa surface receptor also known as B7-2. CD86 and CD80 are members of the B7 family of costimulatory molecules. CD86 is expressed at low levels on B cells, macrophages, and dendritic cells and is upregulated on B cells through a variety of surface stimuli including the BCR complex, CD40 and some cytokine receptors. In addition to CD80 (B7-1), CD86 is a counter-receptor for the T cell surface molecules CD28 and CD152 (CTLA-4). The interaction of CD86 with its ligands plays a critical role in T-B crosstalk, T cell costimulation, autoantibody production and Th2-mediated Ig production. The kinetics of upregulation of CD86 upon stimulation supports its major contribution during the primary phase of an immune response.

## Usage

For research use only, not for diagnostic or therapeutic use. The IT2.2 antibody has been reported for use in flow cytometric analysis. IT2.2 has also been reported in blocking of CD86 in functional studies. (Please use Functional Grade purified IT2.2, cat. 16-0869, in functional assays.)

## Applications Tested

The IT2.2 antibody has been tested by flow cytometric analysis of human peripheral leukocytes. This can be used at less than or equal to 0.25 μg per 100 μl blood (or per 1 million cells in 100 μl total staining volume). It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

## Related Products

Cat. 12-0869 PE anti-human CD86 (B7-2) (clone IT2.2)  
Cat. 13-0869 Biotin anti-human CD86 (B7-2) (clone IT2.2)

Cat. 15-0869 PE-Cy5 anti-human CD86 (B7-2) (clone IT2.2)  
Cat. 16-0869 Functional Grade Purified anti-human CD86 (B7-2) (clone IT2.2)  
Cat. 11-4011 FITC Anti-Mouse IgG  
Cat. 13-4013 Biotin Anti-Mouse IgG (clone Polyclonal)  
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)  
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)  
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)  
Cat. 14-4732 Affinity Purified Mouse IgG2b Isotype Control

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#### References

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Kishimoto, T., A.E.G., von dem Borne, et al. eds. (1998). *Leucocyte Typing VI: White Cell Differentiation Antigens*. Garland Publishing Inc. London.

Azuma, M., D. Ito, et al. (1993). "B70 antigen is a second ligand for CTLA-4 and CD28." *Nature* 366(6450): 76-9.

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