

PN IM2728 Monoclonal Antibody CD86

Form	Freeze-dried	Clone	HA5.2B7
Quantity	0.2 mg	Isotype	IgG2b
Presentation	Unconjugated	Species	Mouse
Purity	Purified IgG		

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

The CD86 antigen (B7-2, B70) is a single-chain transmembrane glycoprotein, structurally similar to CD80 (B7-1) (1, 2). Its molecular weight is 80 kDa, under reducing conditions. The extracellular region is composed of one V-type and one C-type Ig-like domains. There are 8 potential sites for N-glycosylation. The cytoplasmic tail has 3 potential sites for protein kinase C phosphorylation (3, 4). CD86 shares with CD80 the same co-receptors on T cells; CD28 and CD152 (CTLA-4). CD86 binds to CD152 with a 20-100-fold higher affinity than to CD28 (5). CD86 and CD80 have a critical role in one costimulatory pathway involved in the prevention of antigen-specific T-cell tolerance (anergy), mediated by ligation of CD28 on T cells by its ligands, CD86 and CD80 on antigen-presenting cells (6, 7). CD86 is constitutively expressed by interdigitating dendritic cells, peripheral blood monocytes, activated B cells, and, at a lower level, by peripheral blood dendritic cells (1, 2). On lymphocytes, CD86 appears as a B-cell activation antigen. It is preferentially expressed by memory B cells and germinal B center cells, but not on plasma cells (3). Its expression can be up-regulated by activation through surface immunoglobulin, MHC-class II molecules, and by CD40 triggering, or by PMA treatment with ionomycin. Also, PHA-activated T cells show a weak expression of CD86 on CD4-positive cells, and a consistent one on CD8-positive cells (4).

APPLICATIONS

- Flow cytometry.
- Immunohistochemistry; On both frozen and paraffin-embedded tissue sections (internal data).

BUFFER

1 mg/mL bovine serum albumin in phosphate-buffered saline.

STORAGE CONDITIONS AND STABILITY

This freeze-dried form may be stored at 2-8°C until the expiration date stated on the vial label. No preservative has been added.

REAGENT PREPARATION

Depending of usage, reconstitute with 1 mL of distilled water, with or without 0.1% sodium azide (w/v).

The reconstituted form including 0.1% sodium azide may be stored for up to one month at 2-8°C.

The reconstituted form without sodium azide can be stored at -20°C or less, until the expiration date stated on the vial label. Aliquoting is recommended to avoid multiple freezing / thawing cycles.

PROCEDURE**Flow cytometry:**

Use 10 µL of the reconstituted purified antibody per 5×10^5 cells per test, or per 100 µL whole blood.

SELECTED RESEARCH REFERENCES

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- [4668] Salamone, M.d.C., Salamone, G.V., Reyes, G.B., Barbosa, M., Kado, M., Ramhorst, R., Fainboim, L., "CD86 workshop: Preferential staining of activated CD8-positive T lymphocytes by monoclonal antibody CD86.6", 1997, Leucocyte Typing VI, White Cell Differentiation Antigens, Kishimoto, T., et al., Eds., Garland Publishing, Inc., 204-205
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- [3104] Gause, W.C., Halvorson, M.J., Lu, P., Greenwald, R., Linsley, P., Urban, J.F., Finkelman, F.D., "The function of costimulatory molecules and the development of IL-4 producing T cells", 1997, Immunol. Today, 3, 18, 115-120.

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