

Datasheet for ABIN2749230

anti-CD86 antibody**3** Images**7** Publications[Go to Product page](#)

Overview

| | |
|--------------|--|
| Quantity: | 0.1 mg |
| Target: | CD86 |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This CD86 antibody is un-conjugated |
| Application: | Flow Cytometry (FACS), Western Blotting (WB), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro)), Functional Studies (Func) |

Product Details

| | |
|-----------------------------|---|
| Immunogen: | B-lymphoblastoid cell line ARH 77 |
| Clone: | BU63 |
| Isotype: | IgG1 |
| Specificity: | The mouse monoclonal antibody BU63 reacts with an extracellular epitope of CD86 (B7-2), a 70 kDa type I transmembrane glycoprotein of immunoglobulin supergene family, expressed on professional antigen-presenting cells, such as dendritic cells, macrophages or activated B lymphocytes. |
| Cross-Reactivity (Details): | Human, Other not determined |
| Purification: | Purified by protein-A affinity chromatography. |
| Purity: | > 95 % (by SDS-PAGE) |

Product Details

Endotoxin Level: Endotoxin level is less than 0.01 EU/μg of the protein, as determined by the LAL test.

Target Details

Target: CD86

Alternative Name: CD86 ([CD86 Products](#))

Background: CD86 Molecule, CD80 (B7-1) and CD86 (B7-2) are ligands of T cell critical costimulatory molecule CD28 and of an inhibitory receptor CTLA-4 (CD152). The both B7 Molecules are expressed on professional antigen-presenting cells and are essential for T cell activation, the both molecules can also substitute for each other in this process. The question what are the differences in CD80 and CD86 competency has not been fully elucidated yet, there are still conflicts in results about their respective roles in initiation or sustaining of the T cell immune response., B7-2, FUN-1, LAB72

Gene ID: 942

UniProt: [P42081](#)

Pathways: [TCR Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Cellular Response to Molecule of Bacterial Origin](#), [Positive Regulation of Immune Effector Process](#), [Activated T Cell Proliferation](#)

Application Details

Application Notes: Functional application: The antibody BU63 blocks mixed lymphocyte reaction (MLR) and binding of soluble CTLA-4 (CD152)-mulg fusion protein to CD86 (B7-2).
Flow cytometry: Recommended dilution: 5 μg/mL.

Restrictions: For Research Use only

Handling

Concentration: 1 mg/mL

Buffer: Phosphate buffered saline (PBS), pH 7.4

Preservative: Azide free

Storage: 4 °C

Storage Comment: Store at 2-8°C. Do not freeze.

Publications

Product cited in: Hovden, Karlsen, Jonsson, Aarstad, Appel: "Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses." in: **BMC immunology**, Vol. 12, pp. 2, (2011) ([PubMed](#)).

Kolar, Mehta, Pelayo, Capra: "A novel human B cell subpopulation representing the initial germinal center population to express AID." in: **Blood**, Vol. 109, Issue 6, pp. 2545-52, (2007) ([PubMed](#)).

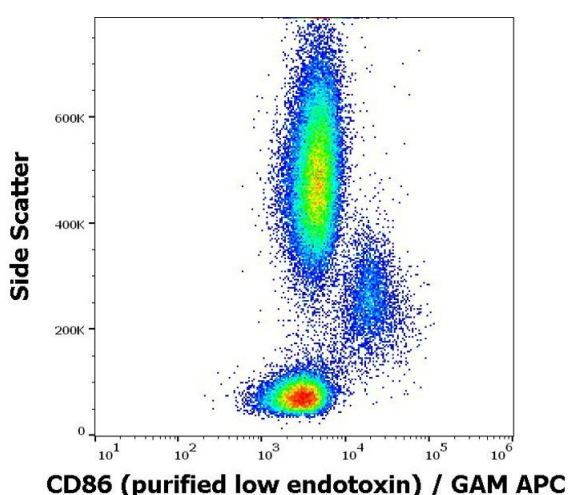
Chan, Baird, Mercer, Fleming: "Maturation and function of human dendritic cells are inhibited by orf virus-encoded interleukin-10." in: **The Journal of general virology**, Vol. 87, Issue Pt 11, pp. 3177-81, (2006) ([PubMed](#)).

Zhan, Towler, Calder: "The immunomodulatory role of human conjunctival epithelial cells." in: **Investigative ophthalmology & visual science**, Vol. 44, Issue 9, pp. 3906-10, (2003) ([PubMed](#)).

Mauri, Wyss-Coray, Gallati, Pichler: "Antigen-presenting T cells induce the development of cytotoxic CD4+ T cells. I. Involvement of the CD80-CD28 adhesion molecules." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 155, Issue 1, pp. 118-27, (1995) ([PubMed](#)).

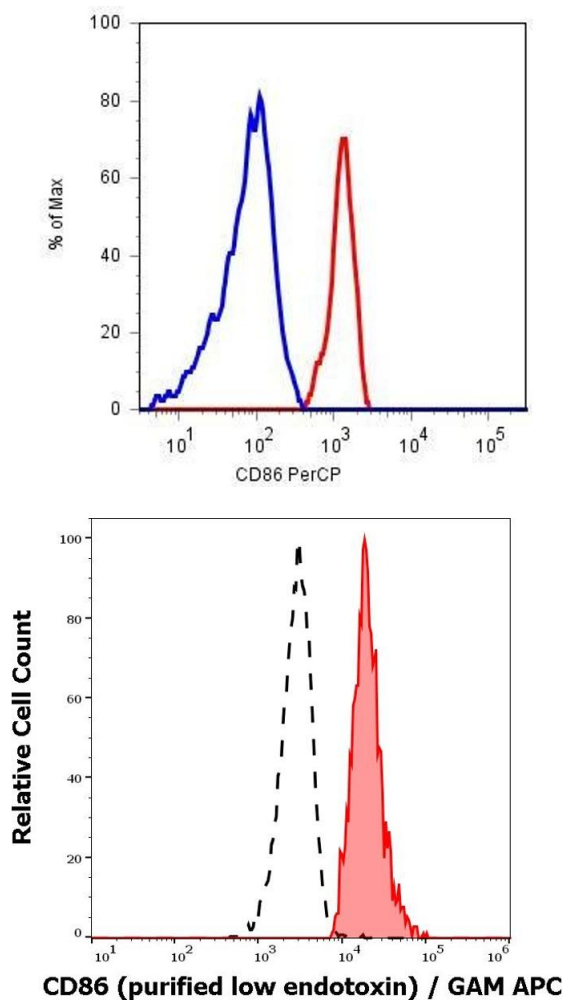
There are more publications referencing this product on: [Product page](#)

Images



Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral blood stained using anti-human CD86 (BU63) purified antibody (low endotoxin, concentration in sample 3 µg/mL) GAM APC.



Flow Cytometry

Image 2. Surface staining of human peripheral blood cells with anti-CD86 (BU63) PerCP (monocyte gate).

Flow Cytometry

Image 3. Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD86 (BU63) purified antibody (low endotoxin, concentration in sample 3 µg/mL) GAM APC.