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Anti-CD86/B7-2 Antibody
Catalog # ABO11942

Specification

Anti-CD86/B7-2 Antibody - Product Information

Application	**WB, IHC-F, FC, ICC**
Primary Accession	P42081
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for T-lymphocyte activation antigen CD86(CD86) detection. Tested with WB, IHC-F, ICC, FCM in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD86/B7-2 Antibody - Additional Information

Gene ID 942

Other Names
T-lymphocyte activation antigen CD86, Activation B7-2 antigen, B70, BU63, CTLA-4 counter-receptor B7.2, FUN-1, CD86, CD86, CD28LG2

Calculated MW
37682 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml

 Immunocytochemistry, 0.5-1 µg/ml
Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3Î¼g/1x10⁶cells

Subcellular Localization
Cell membrane; Single-pass type I membrane protein.

Tissue Specificity
Expressed by activated B-lymphocytes and monocytes.

Protein Name
T-lymphocyte activation antigen CD86

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CD86 recombinant protein (Position: A24-F329). Human CD86 shares 50% amino acid (aa) sequence identity with mouse CD86.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Anti-CD86/B7-2 Antibody - Protein Information

Name CD86

Synonyms CD28LG2

Function
Receptor involved in the costimulatory signal essential for T-lymphocyte proliferation and interleukin-2 production, by binding CD28 or CTLA-4 (PubMed:12196291). May play a critical role in the early events of T-cell activation and costimulation of naive T-cells, such as deciding between immunity and anergy that is made by T-cells within 24 hours after activation (PubMed:7527824). Also involved in the regulation of B cells function, plays a role in regulating the level of IgG(1) produced. Upon CD40 engagement, activates NF-kappa-B signaling pathway via phospholipase C and protein kinase C activation (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed by activated B-lymphocytes and monocytes.

Anti-CD86/B7-2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD86/B7-2 Antibody - Images

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Figure 1. Western blot analysis of CD86 using anti-CD86 antibody (ABO11942). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.Lane 1: Recombinant Human CD86 Protein 0.5ng After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD86 antigen affinity purified polyclonal antibody (Catalog # ABO11942) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD86 at approximately 38KD. The expected band size for CD86 is at 38KD.

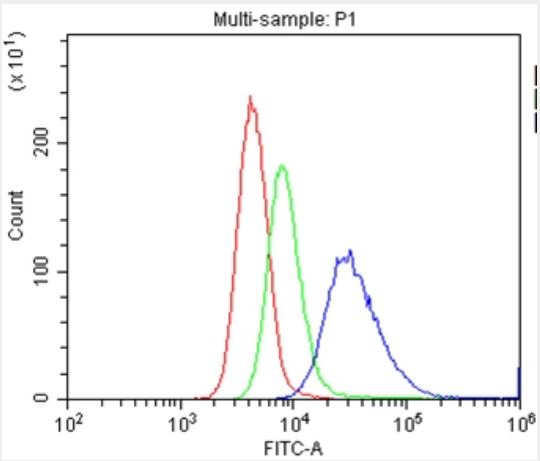

Figure 2. Flow Cytometry analysis of U937 cells using anti-CD86 antibody (ABO11942).Overlay histogram showing U937 cells stained with ABO11942 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD86 Antibody (ABO11942,1Î¼g/1x106 cells) for 30 min at 20Â°C. DyLight?488 conjugated goat anti-rabbit IgG (BA1127, 5-10Î¼g/1x106 cells) was used as secondary antibody for 30 minutes at 20Â°C. Isotype control antibody (Green line) was rabbit IgG (1Î¼g/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-CD86/B7-2 Antibody - Background

Cluster of Differentiation 86 (also known as CD86 and B7-2) is a protein expressed on antigen-presenting cells that provides costimulatory signals necessary for T cell activation and survival. The CD86 gene encodes a type I membrane protein that is a member of the immunoglobulin superfamily. Using fluorescence in situ hybridization mapping, the CD86, like CD80, was mapped to human 3q21. The antigen presentation coactivators B71 and B72, which are

important in other immune-mediated thyroid diseases, are important for lymphocytic infiltration and the immune response against thyroid carcinoma.