

## Anti-CD80/B7 1 Rabbit Monoclonal Antibody

**Catalog # ABO13507** 

# **Specification**

# Anti-CD80/B7 1 Rabbit Monoclonal Antibody - Product Information

Application
Primary Accession
Host
Rabbit
Isotype
Reactivity
Clonality
Format

WB, IHC
P33681
Rabbit
Rabbit
Rabbit
Rabbit
Human
Monoclonal

**Description** 

Anti-CD80/B7 1 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

## Anti-CD80/B7 1 Rabbit Monoclonal Antibody - Additional Information

#### Gene ID 941

#### **Other Names**

T-lymphocyte activation antigen CD80, Activation B7-1 antigen, BB1, CTLA-4 counter-receptor B7.1, B7, CD80, CD80, CD28LG, CD28LG1, LAB7

## Calculated MW 33048 MW KDa

## **Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200

## **Subcellular Localization**

Membrane; Single-pass type I membrane protein.

#### **Tissue Specificity**

Expressed on activated B-cells, macrophages and dendritic cells.

#### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

### **Immunogen**

A synthesized peptide derived from human CD80

## **Purification**

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated



freeze-thaw cycles.

## Anti-CD80/B7 1 Rabbit Monoclonal Antibody - Protein Information

Name CD80

Synonyms CD28LG1, CD28LG1, LAB7

## **Function**

Costimulatory molecule that belongs to the immunoglobulin superfamily that plays an important role in T-lymphocyte activation (PubMed:<a href="http://www.uniprot.org/citations/38467718" target=" blank">38467718</a>). Acts as the primary auxiliary signal augmenting the MHC/TCR signal in naive T-cells together with the CD28 receptor which is constitutively expressed on the cell surface of T-cells (PubMed:<a href="http://www.uniprot.org/citations/12196291" target=" blank">12196291</a>). In turn, activates different signaling pathways such as NF-kappa-B or MAPK leading to the production of different cytokines (PubMed:<a href="http://www.uniprot.org/citations/10438913" target=" blank">10438913</a>). In addition, CD28/CD80 costimulatory signal stimulates glucose metabolism and ATP synthesis of T-cells by activating the PI3K/Akt signaling pathway (PubMed: <a href="http://www.uniprot.org/citations/12121659" target=" blank">12121659</a>). Also acts as a regulator of PDL1/PDCD1 interactions to limit excess engagement of PDL1 and its inhibitory role in immune responses (PubMed:<a href="http://www.uniprot.org/citations/36727298" target=" blank">36727298</a>). Expressed on B-cells, plays a critical role in regulating interactions between B-cells and T-cells in both early and late germinal center responses, which are crucial for the generation of effective humoral immune responses (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

Expressed on activated B-cells, macrophages and dendritic cells

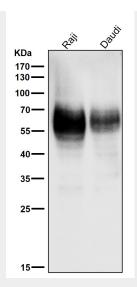
## Anti-CD80/B7 1 Rabbit Monoclonal Antibody - Protocols

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

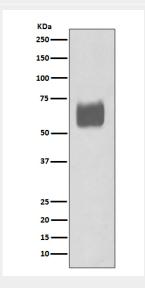
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-CD80/B7 1 Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of CD80 expression in Raji cell lysate.