

# **Product datasheet for TA355078**

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## B7-1 (CD80) Mouse Monoclonal Antibody [Clone ID: 11D1]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 11D1

**Applications:** FC, IF, IHC

**Recommended Dilution:** IHC starting at 2-5μg/mL.IF start at 5μg/mL. FC: 10μg/ml.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** CD80 antibody was raised against the extracellular domain of human CD80.

**Formulation:** CD80 Antibody is supplied in PBS containing 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** CD80 Antibody is supplied as protein A purified IgG1.

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: Predicted: 32 kDa; Observed: 50 kDa

Gene Name: CD80 molecule

Database Link: NP 005182

Entrez Gene 941 Human

P33681



Background:

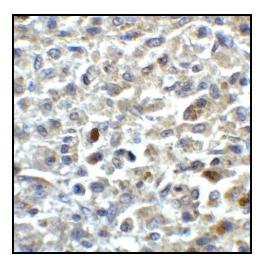
CD80 Antibody: CD80, also known as B7-1, is a type I membrane protein that is a member of the immunoglobulin superfamily. Like the related protein CD86, this protein is expressed by antigen-presenting cells, and is the ligand for two proteins at the cell surface of T cells, CD28 and the cytotoxic T-lymphocyte-associated protein 4 (CTLA-4). Binding of this protein with CD28 antigen is a costimulatory signal for activation of the T-cell and induces T-cell proliferation and cytokine production. CTLA-4 binding negatively regulates T-cell activation and diminishes the immune response (1). Blocking the CTLA-4-CD80/CD86 interaction has been shown to enhance T-cell functions in acute lymphoblastomic leukemia (ALL), suggesting that this pathway may be an attractive target for future cancer immunotherapy (2).

Synonyms: B7; BB1; CD28LG; CD28LG1; LAB7

**Note:** CD80 antibody can be used for immunohistochemistry starting at 2 - 5 μg/mL. For

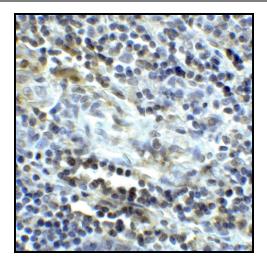
immunofluorescence start at 5 μg/mL. Flow cytometry at 10 μg/ml.

## **Product images:**

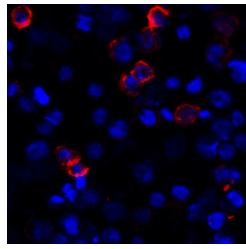


Immunohistochemistry of CD80 in human stomach carcinoma tissue with CD80 antibody at 5ug/ml.

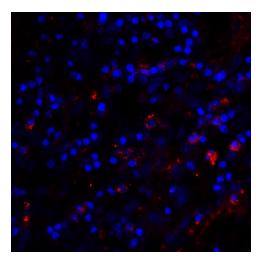




Immunohistochemistry of CD80 in human tonsil tissue with CD80 antibody at 5ug/ml.

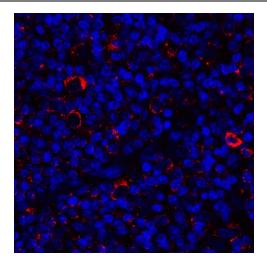


Immunocytochemistry of CD80 in transfected HEK293 cells with CD80 antibody at 1ug/ml. Lower left: Immunocytochemistry in transfected HEK293 cells with control mouse IgG antibody at 1ug/ml.

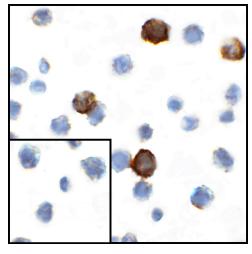


Immunofluorescence of CD80 in transfected HEK293 cells with CD80 antibody at 2ug/ml.

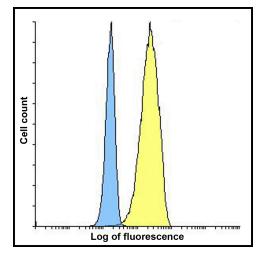




Immunofluorescence of CD80 in human stomach carcinoma tissue with CD80 antibody at 20ug/ml.



Immunofluorescence of CD80 in human tonsil tissue with CD80 antibody at 2ug/ml.



Flow cytometry analysis of CD80 overexpressing HEK293 cells using CD80 antibody and control mouse IgG antibody at 10ug/ml. Blue: Untransfected HEK293 cells. Yellow: CD80 overexpressing HEK293 cells.