

## B7-1 (MAB104): sc-58913

### BACKGROUND

T cell proliferation and lymphokine production are triggered by occupation of the TCR by antigen, followed by a costimulatory signal that is delivered by a ligand expressed on antigen presenting cells. The B7-related cell surface proteins CD80 (B7-1) and CD86 (B7-2) are expressed on antigen presenting cells, bind the homologous T cell receptors CTLA-4 (cytotoxic T lymphocyte-associated protein-4) and CD28 and trigger costimulatory signals for optimal T cell activation. CTLA-4 shares 31% overall amino acid identity with CD28 and it has been proposed that CD28 and CTLA-4 are functionally redundant. SLAMF7 is a novel receptor on T cells that, when engaged, potentiates T cell expansion in a CD28-independent manner. B7, also designated BB1, is another ligand or counterreceptor for CD28 and CTLA-4 that is expressed on the antigen-presenting cell.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: CD80 (human) mapping to 3q13.3-q21; Cd80 (mouse) mapping to 16 B5.

### SOURCE

B7-1 (MAB104) is a mouse monoclonal antibody raised against Burkitt's lymphoma cell line Jijoye of human origin.

### PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 1% BSA.

### APPLICATIONS

B7-1 (MAB104) is recommended for detection of B7-1 in vitro activated normal B cells, with Epstein Barr Virus (EBV) transformed B cell lines, with Burkitt's lymphoma cell lines and with freshly isolated follicular B lymphoma cells of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells); may cross-react with a small proportion of non-activated normal B cells and with HTLV1 infected T cells; non cross-reactive with peripheral monocytes, resting and activated normal T cells, T cell lines, T cell clones and myelomonocytic cell lines.

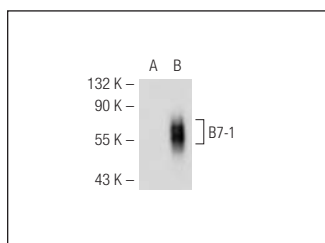
Suitable for use as control antibody for B7-1 siRNA (h): sc-29773.

Molecular Weight of B7-1: 60 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



B7-1 (MAB104): sc-58913. Western blot analysis of B7-1 expression in non-transfected: sc-117752 (A) and human B7-1 transfected: sc-115617 (B) 293T whole cell lysates.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.