

Monoclonal Antibody CD80

PN IM1449 – Purified – Freeze-dried – 0.2 mg – Clone MAB104

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

The CD80 molecule, also called BB1 or human B-lymphocyte activation antigen B7-1 (formerly referred to as B7) is the ligand for CD28 (1) and CD152 (cytotoxic T lymphocyte antigen, CTLA-4) glycoproteins (2).

The CD80 and CD86 genes are linked on human chromosome 3 and encode B7-1 and B7-2, respectively, which are structurally similar members of the immunoglobulin superfamily expressed on a variety of hematopoietic cell types (3).

CD80 plays a role in the interactions that are involved in the regulation of T-cell activation. CD80 and CD86 provide a costimulatory signal to T cells by interacting with CD28 on T cells whereas the binding of CD80 and CD86 to CD152 negatively regulates T-cell activation (4 – 8).

MAB104 antibody reacts with *in vitro* activated normal B cells. It reacts weakly with a small proportion of non-activated normal B cells.

MAB104 antibody does not react with peripheral monocytes, resting and activated normal T cells, T-cell lines nor with T-cell clones (9).

The MAB104 monoclonal antibody was clustered as CD80 during the 5th International Workshop on Human Leukocyte Differentiation Antigens (HLDA), held in Boston, USA, in 1994 (10).

REAGENT

Monoclonal Antibody CD80
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|--------------------------|---|
| Clone | MAB104 |
| Isotype | IgG1 |
| Immunogen | Jijoye cells (Human Burkitt Lymphoma cell line) |
| Hybridoma Species | NS1 X balb/c Mouse |
| Source | ascites fluid |
| Purification | Protein A affinity chromatography |

REAGENT CONTENTS

1 mg/ml bovine serum albumin in phosphate-buffered saline.

STATEMENT OF WARNINGS

- Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
- Never pipet by mouth and avoid contact of samples with skin and mucous membranes.

- Do not use reagent beyond the expiration date on the vial label.
- Avoid microbial contamination of reagent or erroneous results may occur.
- Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date on the vial label when stored at 2 – 8°C. The reconstituted form may be stored at – 20°C until the expiration date. Aliquotting is suggested to avoid multiple freeze-thaw cycles. The addition of sodium azide at 0.1% (w/v) is recommended for storage of the reconstituted form for up to one month at 2 – 8°C. Minimize exposure to light and warmth.

REAGENT PREPARATION

Reconstitute with 1 mL of distilled water. No preservative has been added.

APPLICATIONS

Flow cytometry.
Functional study of B cell subpopulations.
This antibody is suitable on frozen sections or cell smears.

For each application, it is recommended to establish the right range of antibody dilutions to be used for the experiment.

SELECTED RESEARCH REFERENCES

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- Engel, P., Wagner, N., Tedder, T.F., "CD80 workshop report", 1995, in Leucocyte Typing V, Schlossmann, S.F., et al Eds., Oxford University Press, 682-684.

PRODUCT AVAILABILITY

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For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.

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