



Product Information Sheet

Polyclonal Anti- Cluster of Differentiation 80, CD80/ B7-1

Catalogue No. PA1365 Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of

human CD80 (57-71aa), identical to the related mouse and rat

sequence.

Ig type rabbit IgG Purity

Immunogen affinity purified.

Size 100µg/vial Application

Specificity

Human.

No cross reactivity with other

Lot No. 0131112026527

proteins.

Recommended application

Western blot

| | Concen- tration | Tested Species | Concluded Species | Antigen Retrieval |
|-------|--------------------|-------------------|----------------------|----------------------|
| WB | 1μg/ml | Hu | - | - |
| IHC-P | - | - | - | - |
| IHC-F | - | - | - | - |
| ICC | - | - | - | - |

WB: The detection limit for CD80/ B7-1 is approximately 2.5ng/lane under non-reducing and reducing conditions.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

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

Thimerosal, $0.05mg\ NaN_3$.

Reconstitution

To reorder contact us at: 0.2ml of distilled water will yield a concentration of 500µg/ml.

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Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

Cluster of Differentiation 80 (also CD80 and B7-1) is a protein found on activated B cells and monocytes that provides a costimulatory signal necessary for T cell activation and survival. It is the ligand for two different proteins on the T cell surface: CD28 (for autoregulation and intercellular association) and CTLA-4 (for attenuation of regulation and cellular disassociation). CD80 works in tandem with CD86 to prime T cells. The CD80 genes encode B7-1 which are structurally similar members of the immunoglobulin superfamily expressed on a variety of hematopoietic cell types. Reeves et al. (1997) stated that B7-1 and B7-2 provide a costimulatory signal to T cells by interacting with CD28 and CTLA4.

REFERENCE

- 1. Peach, R J; Bajorath J, Naemura J, Leytze G, Greene J, Aruffo A, Linsley P S (Sep. 1995). "Both extracellular immunoglobin-like domains of CD80 contain residues critical for binding T cell surface receptors CTLA-4 and CD28". J. Biol. Chem. (UNITED STATES) 270 (36): 21181–7.
- 2.Stamper, C C; Zhang Y, Tobin J F, Erbe D V, Ikemizu S, Davis S J, Stahl M L, Seehra J, Somers W S, Mosyak L (Mar. 2001). "Crystal structure of the B7-1/CTLA-4 complex that inhibits human immune responses". Nature (England) 410 (6828): 608–11.