

1F-677-T025

## Monoclonal Antibody to CD83 Fluorescein (FITC) conjugated (25 tests)

Clone: HB15e

Isotype: Mouse IgG1

Specificity: The mouse monoclonal antibody HB15e recognizes CD83, a 40-45 kDa type I

glycoprotein expressed on mature dendritic cells.

HLDA IV.; WS Code T 85

Regulatory Status: RUO

Immunogen: Human CD83-transfected Cos cells

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC and adjusted for

direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: CD83 is a 40-45 kDa heavily glycosylated type I cell surface glycoprotein of

immunoglobulin family. It is expressed on the surface of mature dendritic cells, Langerhans cells in the skin, and interdigitating reticulum cells in the lymphoid tissues. Low expression of CD83 has been reported in activated T and B cells. Cytoplasmic expression of CD83 can be detected also in monocytes and macrophages. CD83 is involved in modulation of antigen presentation. Soluble CD83 has immunoregulatory functions, it is able to down-regulate dendritic cell maturation and stimulation of T cells. In the developing immune system, release of soluble CD83 from dendritic cells upon stimulation by gram-positive or gram-negative bacteria has anti-allergic effect. Herpes simplex virus, on the other

hand, causes CD83 degradation in mature dendritic cells.



## PRODUCT DATA SHEET

## References:

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\*Kummer M, Turza NM, Muhl-Zurbes P, Lechmann M, Boutell C, Coffin RS, Everett RD, Steinkasserer A, Prechtel AT: Herpes simplex virus type 1 induces CD83 degradation in mature dendritic cells with immediate-early kinetics via the cellular proteasome. J Virol. 2007 Jun;81(12):6326-38.

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\*And many other.

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