

T8-677-T025

Monoclonal Antibody to CD83 PE-Cy™5 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 tandem dye PE-Cy™5 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary. The reagent is provided in stabilizing phosphate buffered saline (PBS) solution Storage Buffer: 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. The reagent is designed for Flow Cytometry analysis of human blood cells using 4 Usage: μ reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests. **Expiration:** See vial label See vial label Lot Number: CD83 is a 40-45 kDa heavily glycosylated type I cell surface glycoprotein of **Background:** 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

hand, causes CD83 degradation in mature dendritic cells.

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EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz

gram-negative bacteria has anti-allergic effect. Herpes simplex virus, on the other



Antibodies

References:

*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).

*Loré K, Sönnerborg A, Broström C, Goh LE, Perrin L, McDade H, Stellbrink HJ, Gazzard B, Weber R, Napolitano LA, van Kooyk Y, Andersson J: Accumulation of DC-SIGN+CD40+ dendritic cells with reduced CD80 and CD86 expression in lymphoid tissue during acute HIV-1 infection. AIDS. 2002 Mar 29;16(5):683-92.

*Cao W, Lee SH, Lu J: CD83 is preformed inside monocytes, macrophages and dendritic cells, but it is only stably expressed on activated dendritic cells. Biochem J. 2005 Jan 1;385(Pt 1):85-93.

*Klein E, Koch S, Borm B, Neumann J, Herzog V, Koch N, Bieber T: CD83 localization in a recycling compartment of immature human monocyte-derived dendritic cells. Int Immunol. 2005 Apr;17(4):477-87.

*Lundell AC, Andersson K, Josefsson E, Steinkasserer A, Rudin A: Soluble CD14 and CD83 from human neonatal antigen-presenting cells are inducible by commensal bacteria and suppress allergen-induced human neonatal Th2 differentiation. Infect Immun. 2007 Aug;75(8):4097-104.

*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.

*Wang Y, Dennehy PH, Keyserling HL, Tang K, Gentsch JR, Glass RI, Jiang B: Rotavirus infection alters peripheral T-cell homeostasis in children with acute diarrhea. J Virol. 2007 Apr;81(8):3904-12.

*Gerlini G, Mariotti G, Chiarugi A, Di Gennaro P, Caporale R, Parenti A, Cavone L, Tun-Kyi A, Prignano F, Saccardi R, Borgognoni L, Pimpinelli N: Induction of CD83+CD14+ nondendritic antigen-presenting cells by exposure of monocytes to IFN-alpha. J Immunol. 2008 Sep 1;181(5):2999-3008.

*Holmstrøm K, Pedersen AW, Claesson MH, Zocca MB, Jensen SS: Identification of a microRNA signature in dendritic cell vaccines for cancer immunotherapy. Hum Immunol. 2010 Jan;71(1):67-73. *And many other.

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