

Mouse Anti-Human CD83 Molecule Monoclonal Antibody

Cat. No. CAB11504MH Lot. No. (See product label)

SPECIFICATION

Product Overview Mouse Monoclonal Antibody to Human CD83 Molecule

Species Human

Source Mouse

Antigen Description

CD83 antigen, also known as B-cell activation protein, Cell surface protein HB15 and CD83, is a single-pass type I membrane protein which contains one Ig-like V-type (immunoglobulin-like) domain. CD83 is a conserved member of the immunoglobulin superfamily. CD83 is expressed by activated lymphocytes, Langerhans cells and interdigitating reticulum cells. CD83 is a fascinating cell surface molecule with a unique pattern of expression that has multiple confirmed functions in regulating immune system development and function. CD83 represents an intriguing target for immunotherapy due to its preferential expression on mature dendritic cells (DCs), the most efficient of antigen presenting cells. On the protein level, two different isoforms of CD83 exist: a membrane-bound and a soluble form. The isoforms are generated by different subsets of cells, including DCs, T-cells and B-cells, and also differ in their biological function. While the membrane-bound CD83 is of immune stimulatory capacity, activates T-cells and is important for the generation of thymocytes, the soluble CD83 has the opposite effect and has an immune inhibitory capacity. Due to its immune inhibitory function. CD83 may play a significant role in antigen presentation or the cellular interactions that follow lymphocyte activation. CD83 has great potential for treatment of autoimmune diseases, for organ transplantations, and for immunotherapy, just to name a few examples. Moreover, some viruses prevent

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	recognition by the hosts immune system by specifically targeting CD83 surface expression.
Specificity	Human CD83. No cross-reactivity in ELISA with Mouse CD83; Human cell lysate (293 cell line)
Immunogen	Recombinant Human CD83 Protein
Isotype	Mouse IgG2b
Clone	5F 6E5
Applications	WB
Dilution	This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect CD83-His in WB. Using a DAB detection system, the detection limit for CD83-His is approximately 20 ng/lane under non-reducing conditions and 4 ng/lane under reducing conditions.
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, human cell-derived, recombinant Human CD83. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	0.2 µm filtered solution in PBS with 5% trehalose
Storage	This antibody can be stored at 2-8 °C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70°C. Preservative-Free.Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be

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disposed of properly. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	CD83 CD83 molecule [Homo sapiens]
Official Symbol	CD83
Synonyms	CD83; CD83 molecule; CD83 antigen (activated B lymphocytes, immunoglobulin superfamily) ,CD83 molecule; CD83 antigen; BL11; HB15; hCD83; B-cell activation protein; cell surface protein HB15; cell-surface glycoprotein; CD83 antigen (activated B lymphocytes, immunoglobulin superfamily);
Gene ID	9308
mRNA Refseq	NM_001040280
Protein Refseq	NP_001035370
MIM	604534
UniProt ID	Q01151
Chromosome Location	6p23

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