

Technical Data Sheet

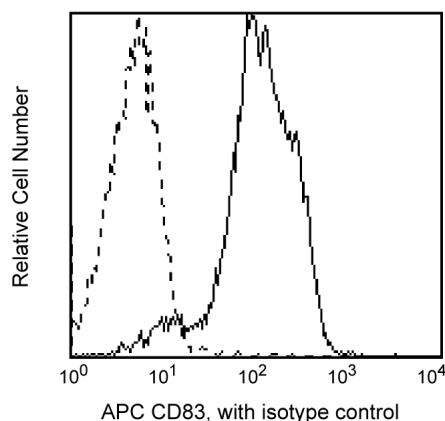
APC Mouse Anti-Human CD83

Product Information

Material Number:	561960
Alternate Name:	BL11; HB15; B-cell activation protein
Size:	25 Tests
Vol. per Test:	20 µl
Clone:	HB15e
Immunogen:	Human CD83 transfected COS cells
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon
Workshop:	VI
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The HB15e monoclonal antibody specifically binds to a 45 kDa type 1 transmembrane glycoprotein member of the Ig superfamily. CD83 is composed of a single V-type Ig extracellular domain with a C-terminal cytoplasmic tail. Cell surface CD83 is expressed mainly by follicular dendritic cells, circulating dendritic cells, interdigitating dendritic cells in lymphoid tissues, in vitro-generated dendritic cells and thymic dendritic cells. However, its expression is not restricted to dendritic cells. CD83 is also expressed on some germinal center B cells and some lymphoblastoid cell lines. Although its function is not known, it may play a role in cell-cell interaction during antigen presentation.



Flow cytometric analysis of CD83 expression on cultured human dendritic cells. Human peripheral blood monocytes were treated with 20 ng/ml of Recombinant Human IL-4 (Cat. No. 554605), and 20 ng/ml Recombinant Human GM-CSF (Cat. No. 550068) proteins for 7 days at 37°C. In addition, 20 ng/ml Recombinant Human TNF (Cat. No. 554618) was added for the last two days of culture. The cells were then stained with either APC Mouse IgG1, κ Isotype Control (Cat. No. 555751; dashed line histogram) or APC Mouse Anti-Human CD83 (Cat. No. 561960; solid line histogram). The fluorescence histogram showing CD83 expression (or Ig Isotype control staining) was derived from gated events with the forward and side light-scattering characteristics of viable dendritic cells.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554656	Stain Buffer (FBS)	500 mL	(none)
555751	APC Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
554657	Stain Buffer (BSA)	500 mL	(none)
554605	Recombinant Human IL-4	5 μ g	(none)
550068	Recombinant Human GM-CSF	10 μ g	(none)
554618	Recombinant Human TNF	10 μ g	(none)
551073	APC Mouse Anti-Human CD83	100 Tests	HB15e

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
7. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
8. Please refer to www.bdbiosciences.com/pharmlingen/protocols for technical protocols.

References

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