

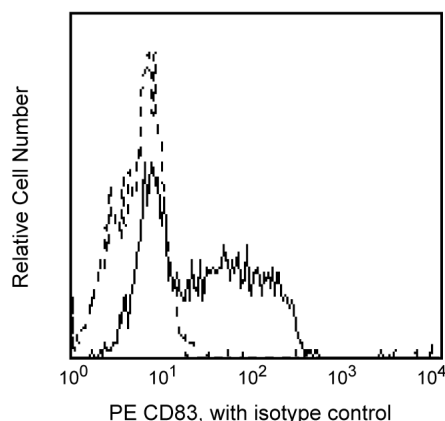
## Technical Data Sheet

**PE Mouse Anti-Human CD83****Product Information**

<b>Material Number:</b>	<b>561959</b>
<b>Alternate Name:</b>	BL11; HB15; B-cell activation protein
<b>Size:</b>	25 Tests
<b>Vol. per Test:</b>	20 µl
<b>Clone:</b>	HB15e
<b>Immunogen:</b>	Human CD83 transfected COS cells
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon
<b>Workshop:</b>	VI
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA 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 PE Mouse IgG1, κ Isotype Control (Cat. No. 555749; dashed line histogram) or PE Mouse Anti-Human CD83 antibody (Cat. No. 556855/561959; 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-scatter characteristics of viable dendritic cells. Flow cytometry was performed on a BD FACScan™ system.

**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 with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

**Application Notes****Application**

Flow cytometry	Routinely Tested
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**BD Biosciences**

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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)
555749	PE Mouse IgG1, $\kappa$ Isotype Control	100 Tests	MOPC-21
556855	PE Mouse Anti-Human CD83	100 Tests	HB15e
554657	Stain Buffer (BSA)	500 mL	(none)
554605	Recombinant Human IL-4	5 $\mu$ g	(none)
550068	Recombinant Human GM-CSF	10 $\mu$ g	(none)
554608	Recombinant Human IL-7	5 $\mu$ g	(none)

## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. For fluorescence spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
7. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

## References

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