

## Datasheet: MCA1582F

<b>Description:</b>	MOUSE ANTI HUMAN CD83:FITC
<b>Specificity:</b>	CD83
<b>Other names:</b>	HB15
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	HB15e
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			1/10 - 1/20

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human		
<b>Species Cross Reactivity</b>	Reacts with: Cynomolgus monkey, Chimpanzee, Baboon, Rhesus Monkey, Tasmanian Devil <b>N.B.</b> Antibody reactivity and working conditions may vary between species.		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		
<b>Immunogen</b>	Cos cells transfected with HB15 cDNA.		

**External Database  
Links**

**UniProt:**

[Q01151](#)   [Related reagents](#)

**Entrez Gene:**

[9308](#)   CD83   [Related reagents](#)

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**Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

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**Specificity**

**Mouse anti Human CD83 antibody, clone HB15e** recognizes the human CD83 cell surface antigen, a 40-45 kDa glycoprotein expressed by peripheral blood dendritic cells. Peripheral lymphocytes can be induced to express very low levels of CD83 after culture in agents such as Con A or PHA.

In immunohistology CD83 is shown to be expressed strongly by interfollicular interdigitating reticulum cells and more weakly by cells within germinal centres. CD83 is also expressed by Langerhan's cells in the skin. The CD83 antigen is a 186-amino-acid single-chain glycoprotein. This molecule is a member of the immunoglobulin superfamily and is composed of an extracellular V-type Ig-like single domain, a transmembrane region, and a short, 40-amino-acid cytoplasmic tail. CD83 antigen undergoes extensive post-translational glycosylation, since the determined Mr is twice the predicted size of the core protein ([Zhou et al. 1992](#)).

However, CD83+ cells have a unique cell surface immuno-phenotype that does not correlate with that of T cells, B cells, NK cells, or cells of the myelomonocytic lineage ([Zhou et al. 1995](#)). CD83+ cells co-express the highest levels of MHC class II molecules, when compared with other leucocyte lineages. They also co-express T cell markers (CD2, CD5), B cell markers (CD40, CD78), myeloid cell markers (CD13, CD33, CD36), cytokine receptors as well as other cell surface molecules ([Zhou et al. 1995](#)) and [Zhou and Tedder 1995](#)).

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**References**

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[Rheum Dis. 66: 992-9.](#)

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19. Duan, Y.G. *et al.* (2016) Characterisation of dendritic cell subsets in chronically inflamed human epididymis. [Andrologia. 48 \(4\): 431-40.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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