# **Technical Data Sheet**

# V450 Mouse Anti-Human CD86

### **Product Information**

 Clone:
 2331(FUN-1)

 Isotype:
 Mouse IgG1, κ

 Reactivity:
 QC Testing: Human

 Workshop:
 V B046, BP126

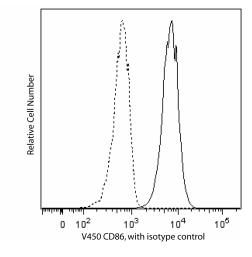
**Storage Buffer:** Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

azide.

### Description

2331 (FUN-1) recognizes a 75 kDa cell surface protein, CD86 (B70/B7-2), expressed primarily on monocytes and activated B cells. Competitive binding assays demonstrate that, while both 2331 (FUN-1) and IT2.2 (anti-CD86, Cat. No. 555663) recognize the same molecule, they react with different epitopes. CD86 is the second ligand for CD28 and CTLA-4 and may play an important role in co-stimulation of T cells in primary immune response. 2331 (FUN-1) blocks costimulation activity of CD86 in functional studies.

The antibody is conjugated to BD Horizon<sup>TM</sup> V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at **450** nm. Conjugates with BD Horizon<sup>TM</sup> V450 can be used in place of Pacific Blue<sup>TM</sup> conjugates.



Analysis of CD86 on Daudi cells. Daudi cells were stained with BD Horizon™ V450 Mouse Anti-Human CD86 and compared to whole blood stained with BD Horizon™ V450 Mouse IgG1, κ Isotype Control (clone MOPC-21, Cat. No. 560373). The isotype control is represented by a dashed line and the V450 Mouse Anti-Human CD86 by the solid line. Flow cytometry was performed on a BD LSR™ Il flow cytometry system.

# **Preparation and Storage**

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

The antibody was conjugated with BD Horizon<sup>TM</sup> V450 under optimum conditions, and unreacted BD Horizon<sup>TM</sup> V450 was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

# **Application Notes**

Application

Flow cytometry Routinely Tested

# **BD Biosciences**

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# **Suggested Companion Products**

Catalog Number	Name	Size	Clone
560373	V450 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

# **Product Notices**

- 1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> cells in a 100-μl experimental sample (a test).
- 2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 5. BD Horizon<sup>TM</sup> V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
- 6. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
- 7. 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.

# References

Azuma H, Uno Y, Shigekiyo T, Saito S. Congenital plasminogen deficiency caused by a Ser572 to Pro mutation. *Blood.* 1993; 82(2):475-480.(Biology) Engel P, Gribben JG, Freeman GJ, et al. The B7-2 (B70) costimulatory molecule expressed by monocytes and activated B lymphocytes is the CD86 differentiation antigen. *Blood.* 1994; 84(5):1402-1407.(Biology)

Engel P, Wagner N, Zhou L, et al. CD86 Workshop Report. In: Schlossman SF, Boumsell L, Gilks W, et al, ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press; 1995.(Clone-specific)

Nozawa Y, Wachi E, Tominaga K, Abe M, Wakasa H. A novel monoclonal antibody (FUN-1) identifies an activation antigen in cells of the B-cell lineage and Reed-Sternberg cells. *J Pathol.* 1993; 169(3):309-315.(Clone-specific)

Nozawa Y, Wakasa H, Abe M. Production and usefulness of monoclonal antibodies against B cells. Fukushima J Med Sci. 1999; 45(1):1-11.(Biology) Yang XF, Chen Z, Wormsley SB. Nashville: American Society of Hematology; 1994.(Clone-specific)

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