# **Technical Data Sheet**

# PerCP-Cy<sup>™</sup>5.5 Mouse Anti-Human CD25

#### **Product Information**

Material Number: 560503

Alternate Name: IL-2R; IL-2Rα; TCGFR; TAC antigen; p55

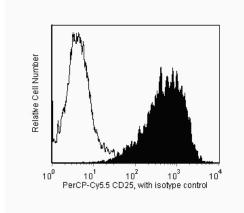
 $\begin{array}{lll} \textbf{Size:} & 50 \text{ tests} \\ \textbf{Vol. per Test:} & 5 \ \mu \text{l} \\ \textbf{Clone:} & \text{M-A251} \\ \textbf{Isotype:} & \text{Mouse IgG1, } \kappa \\ \textbf{Reactivity:} & \text{QC Testing: Human} \end{array}$ 

Workshop: IV A053

**Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

#### Description

The M-A251 monoclonal antibody specifically binds to the 55 kDa type I transmembrane glycoprotein known as the low-affinity interleukin-2 receptor alpha chain subunit (IL-2R $\alpha$ ). CD25 is expressed on regulatory T cells and on activated lymphocytes (T and B) and monocytes. It associates with the IL-2R $\beta$ /CD122 and the IL-2R $\gamma$ /CD132 receptor chains to form the high-affinity IL-2R complex. CD25 expression on T and B lymphocytes is upregulated by antigenic or mitogenic stimulation. Soluble CD25/IL-2R $\alpha$  is produced as a consequence of lymphocyte stimulation and is found in biological fluids following inflammatory responses.



Flow cytometric analysis of CD25 on stimulated human lymphocytes. PHA-stimulated human PBMC (72 hr) were stained with the PerCP-Cy™5.5 Mouse Anti-Human CD25 antibody (shaded) or with a PerCP-Cy™5.5 Mouse IgG1, κ isotype control (unshaded, Cat. No. 550795). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry 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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

# **Application Notes**

Application

Flow cytometry Routine	ly Tested

# **Suggested Companion Products**

Catalog Number	Name	Size	Clone
550795	PerCP-Cy <sup>™</sup> 5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

# **Product Notices**

- 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. An isotype control should be used at the same concentration as the antibody of interest.
- 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.

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- 6. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5<sup>TM</sup>. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
- 7. PerCP-Cy5.5-labelled antibodies can be used with FITC- and R-PE-labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
- 8. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
- 9. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
- 10. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 11. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)
Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens*. New York: Oxford University Press; 1995. (Biology)

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