Product Data Sheet

PerCP/Cy5.5 anti-human CD3

Catalog # / Size: 2186680 / 100 tests

2186675 / 25 tests

Clone: OKT3

Isotype: Mouse IgG2a, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

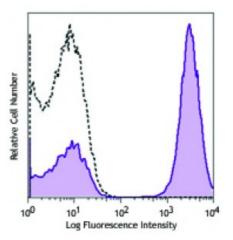
antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD3 (clone OKT3) PerCP/Cy5.5 (filled histogram) or mouse IgG2a, κ PerCP/Cy5.5 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

Application Notes:

The OKT3 monoclonal antibody reacts with an epitope on the epsilon-subunit within the human CD3 complex.

Clone OKT3 can block the binding of clones SK7 and UCHT1.4 The OKT3 antibody is able to induce T cell activation. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections and activation of T cells. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 317304). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 317326) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press.

2. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.

3. Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.

4. Li B, et al. 2005. Immunology 116:487.

5. Jeong HY, et al. 2008. J. Leuckocyte Biol. 83:755. PubMed

6. Alter G, et al. 2008. J. Virol. 82:9668. PubMed

7. Manevich-Mendelson E, et al. 2009. Blood 114:2344. PubMed

8. Pinto JP, et al. 2010. Immunology. 130:217. PubMed

Description: CD3ε is a 20 kD chain of the CD3/T cell receptor (TCR) complex, which is

composed of two CD3 ϵ , one CD3 γ , one CD3 δ , one CD3 ζ (CD247), and a T cell receptor (α/β or γ/δ) heterodimer. It is found on all mature T lymphocytes, NK T cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal

transduction, and T cell activation.

Antigen References:

- 1. Barclay N, et al. 1993. The Leucocyte FactsBook. Academic Press. San Diego.
- 2. Beverly P, et al. 1981. Eur. J. Immunol. 11:329.
 - 3. Lanier L, et al. 1986. J. Immunol. 137:2501.