Product Data Sheet

PE/Cy7 anti-human CD3

Catalog # / Size: 2186665 / 25 tests

2186670 / 100 tests

Clone: OKT3

Isotype: Mouse IgG2a, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

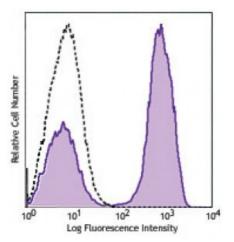
chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7

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) PE/Cy7 (filled histogram) or mouse IgG2a, κ PE/Cy7 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.

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. New York.
- 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
- 9. Biggs MJ, et al. 2011. J. R. Soc. Interface. 8:1462. PubMed
- 10. Zhou J, et al. 2015. J Immunol. 194:4688. 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.