

Biotin anti-human CD3

Catalog # / Size: 2186600 / 100 µg
2186595 / 25 µg

Clone: OKT3

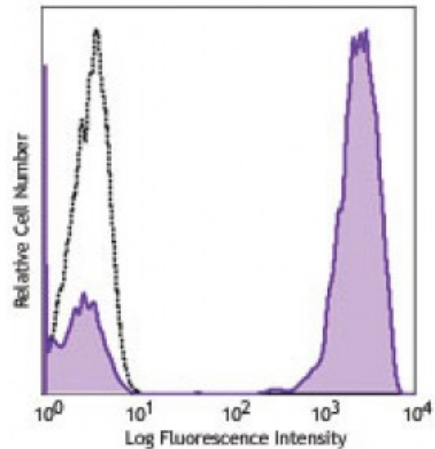
Isotype: Mouse IgG2a, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: NULL



Human peripheral lymphocytes were stained with biotinylated CD3 (clone OKT3) (filled histogram) or mouse IgG2a, κ isotype control (open histogram), followed by Sav-PE.

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 ≤1.0 microg per million cells in 100 microL volume. 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:

- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
- Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
- Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
- Li B, *et al.* 2005. *Immunology* 116:487.
- Jeong HY, *et al.* 2008. *J. Leucocyte Biol.* 83:755. [PubMed](#)
- Alter G, *et al.* 2008. *J. Virol.* 82:9668. [PubMed](#)
- Manevich-Mendelson E, *et al.* 2009. *Blood* 114:2344. [PubMed](#)
- Pinto JP, *et al.* 2010. *Immunology.* 130:217. [PubMed](#)
- Biggs MJ, *et al.* 2011. *J. R. Soc. Interface.* 8:1462. [PubMed](#)

Description: CD3 ϵ 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.