

APC/Fire™ 750 anti-human CD3

Catalog # / Size: 2186760 / 100 tests
2186755 / 25 tests

Clone: OKT3

Isotype: Mouse IgG2a, κ

Immunogen: Human NK cell clone VL186-1.6

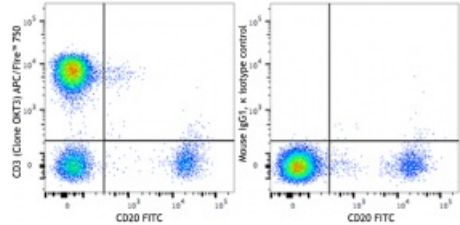
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: HCDM listed

Concentration: Lot-specific



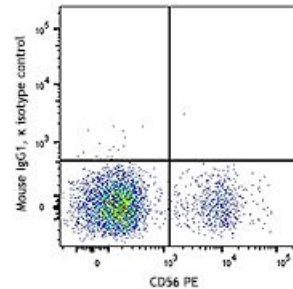
Human peripheral blood lymphocytes were stained with CD20 FITC and CD3 (clone OKT3) APC/Fire™ 750 (left) or mouse IgG1, κ APC/Fire™ 750 isotype control (right).

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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 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/μg).

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. Leucocyte 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](#)

Description:

CD3ε is a 20 kD chain of the CD3/T cell receptor (TCR) complex, which is composed of two CD3ε, one CD3γ, one CD3δ, one CD3ζ (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.