

## LEAF™ Purified anti-human CD3

**Catalog # / Size:** 317303 / 50 µg  
 317304 / 500 µg  
 317315 / 1 mg

**Clone:** OKT3

**Isotype:** Mouse IgG2a, κ

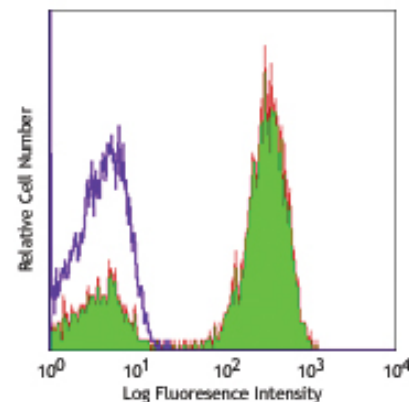
**Reactivity:** Human

**Preparation:** The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

**Formulation:** 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

**Concentration:** 1.0 mg/ml

**Storage:** The CD3 antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Human peripheral blood lymphocytes stained with LEAF™ purified OKT3, followed by anti-mouse IgG FITC

## Applications:

**Applications:** FC - Quality tested  
 IHC, Activ - Reported in the literature

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Clone OKT3 can block the binding of clones SK7 and UCHT1.<sup>8</sup> 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:**

- 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.
- Jeong HY, *et al.* 2008. *J. Leukocyte Biol.* 83:755. PubMed
- Alter G, *et al.* 2008. *J. Virol.* 82:9668. PubMed
- Manevich-Mendelson E, *et al.* 2009. *Blood* 114:2344. PubMed
- Biggs MJ, *et al.* 2011. *J. R. Soc. Interface.* 8:1462. PubMed
- Li B, *et al.* 2005. *Immunology* 116:487.

**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:**

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

<b>Related Products:</b>	<b>Product</b>	<b>Clone</b>	<b>Application</b>
	LEAF™ Purified Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, WB, IP, ICFC, ICC, IF, IHC, FA
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.