## Alexa Fluor® 647 anti-mouse FOXP3

Catalog # / Size: 1232040 / 100 μg

1232035 / 25 μg

Clone: MF-14

**Isotype:** Rat IgG2b, κ

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

chromatography, and conjugated with

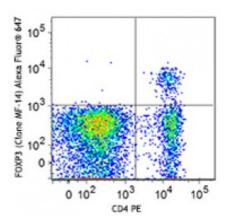
Alexa Fluor® 647 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 splenocytes were surface stained with CD4 PE and then treated with True-Nuclear™
Transcription Factor Buffer Set.
Cells were then stained with FOXP3 (clone MF-14) Alexa Fluor® 647 (top) or rat IgG2b, κ Alexa Fluor® 647 isotype

10<sup>5</sup>

10<sup>5</sup>

10<sup>4</sup>

10<sup>3</sup>

10<sup>2</sup>

0 102

10<sup>3</sup>

CD4 PE

x Isotype Control

Rat IgG2b,

## **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by intracellular flow cytometry . 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.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at

633 nm / 635 nm.

Application

Notes:

**NOTE**: For flow cytometric staining with this clone, True-Nuclear  $^{\text{TM}}$  Transcription Factor Buffer Set (Cat. No. 424401)

offers improved staining and is highly

recommended.

Application References:

1. Ono M, et al. 2007. Nature 446:685.

2. Hori S, et al. 2003. Science 299:1057.

3. Fontenot JD, et al. 2003 Nature Immunol 4:330n

4. Fallarino F, et al. 2009. J. Immunol. 183:6033. PubMed

5. Barber A, et al. 2009 J. Immunol. 183:6939. PubMed

6. Nakashima H, et al. 2010. J. Immunol. 184:4637. PubMed

**Description:** FOXP3 is a 50-55 kD transcription factor, also known as Forkhead box protein P3,

Scurfin, JM2, or IPEX. It is proposed to be a master regulatory gene and more

specific marker of T regulatory cells than most cell surface markers (such as CD4 and CD25). Transduced expression of FOXP3 in CD4  $^+$ /CD25 $^-$  cells has been shown to induce GITR, CD103, and CTLA4 and impart a T regulatory cell phenotype. FOXP3 is mutated in X-linked autoimmunity-allergic dysregulation syndrome (XLAAD or IPEX) in humans and in "scurfy" mice. Overexpression of FOXP3 has been shown to lead to a hypoactive immune state suggesting that this transcriptional factor is a central regulator of T cell activity. In human, unlike in mouse, two isoforms of FOXP3 have been reported: one (FOXP3) corresponding to the canonical full-length sequence; the other (FOXP3  $\delta$ 2) lacking exon 2. The 150D monoclonal antibody reacts with human, mouse and rat FOXP3. The 150D antibody recognizes FOXP3 epitope encoded by exon 2.

## Antigen References:

- 1. Ono M, et al.: Nature 2007 446:685
- 2. Hori S, et al. 2003. Science 299:1057
- 3. Fontenot JD, et al. 2003 Nature Immunol 4:330
- 4. Fallarino F, et al. 2009. J. Immunol