

**Pacific Blue™ anti-mouse FOXP3**

**Catalog # / Size:** 1232050 / 100 µg  
1232045 / 25 µg

**Clone:** MF-14

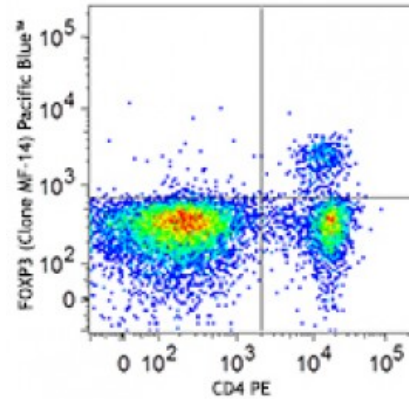
**Isotype:** Rat IgG2b, κ

**Reactivity:** Mouse

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

**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) Pacific Blue™ (top) or rat IgG2b, κ Pacific Blue™ isotype control.

**Applications:**

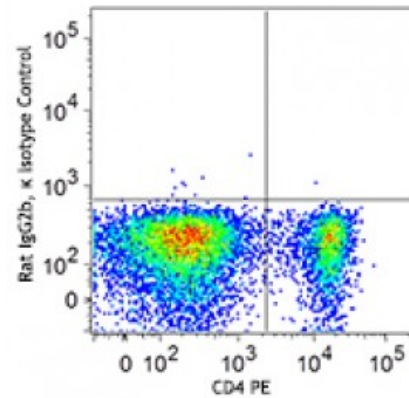
**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular flow cytometry. The suggested use of this reagent is ≤ 1.0 microg per 10<sup>6</sup> cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** **NOTE:** For flow cytometric staining with this clone, True-Nuclear™ 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* 4:330.
  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](#)



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**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<sup>+</sup>/CD25<sup>-</sup> 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.* 2007. *Nature* 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. Immuno*