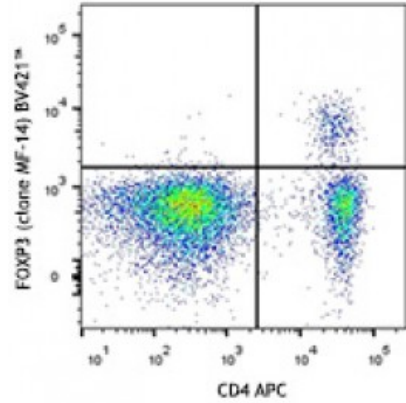


**Brilliant Violet 421™ anti-mouse FOXP3**

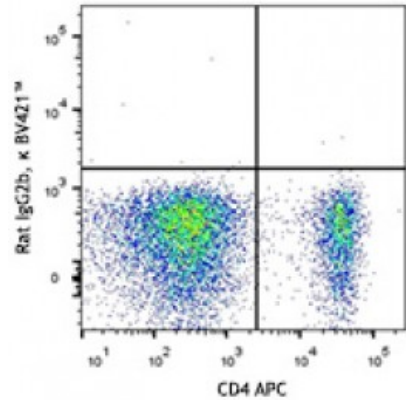
**Catalog # / Size:** 1232095 / 50 µg  
**Clone:** MF-14  
**Isotype:** Rat IgG2b, κ  
**Reactivity:** Mouse  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).  
**Concentration:** Lot-specific



C57BL/6 splenocytes were surface stained with CD4 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with FOXP3 (clone MF-14) Brilliant Violet 421™ (top) or rat IgG2b, κ Brilliant Violet 421&

**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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

**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](#)

**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. Imm*