Brilliant Violet 711™ anti-human FOXP3 Recombinant Antibody

Catalog# / Size	364705 / 25 tests
Clone	QA18A03
Regulatory Status	RUO
Other Names	Forkhead box protein P3, Scurfin, JM2, IPEX, Zinc finger protein JM2
Isotype	Mouse IgG1, κ
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 δ2) lacking exon 2.

Product Details

Verified Reactivity	Human
Antibody Type	Recombinant
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Nuclear™ Transcription Factor Staining Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µL per 106 cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)

Antigen Details

Structure	Forkhead/winged-helix transcription factor family, approximately 50 kD, contains zinc finger and forkhead domains
Distribution	Nuclear; expressed in T regulatory cells
Function	Transcription factor proposed to be a master regulatory gene in T regulatory cell development and a critical factor for immune homeostasis
Interaction	Interacts with DNA
Antigen References	1. Hori S, *et al.* 2003. *Science* 299:1057. 2. Gandhi R, *et al.* 2010. *Nat. Immunol.* 11:846.
Gene ID	50943

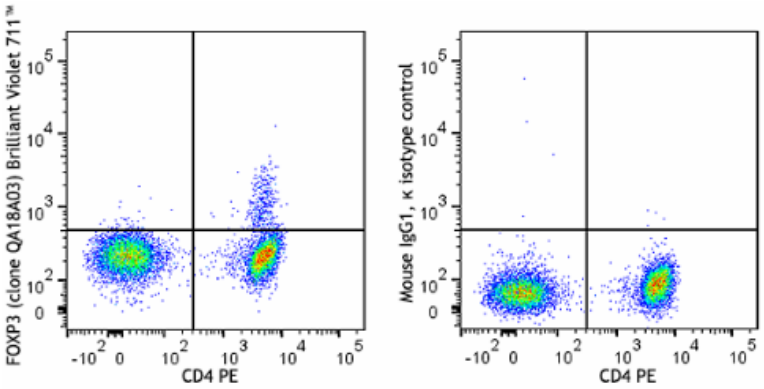
Related Protocols

- True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate
- True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes

Other Formats

PE anti-human FOXP3 Recombinant Antibody, Purified anti-human FOXP3 Recombinant Antibody, Brilliant Violet 711™ anti-human FOXP3 Recombinant Antibody

Product Data



Human peripheral blood lymphocytes were surface stained with anti-human CD4 (clone RPA-T4) PE. Cells were then fixed and permeabilized with True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401) and intracellularly stained with anti-human FOXP3 recombinant (clone QA18A03) Brilliant Violet 711™ (left) or mouse IgG1, κ Brilliant Violet 711™ isotype control (right).

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