

PE anti-mouse/rat/human FOXP3 Antibody

Catalog# / Size	320007 / 25 tests 320008 / 100 tests
Clone	150D
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 δ 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.

Product Details

Verified Reactivity	Human, Mouse, Rat
Reported Reactivity	Cynomolgus, Rhesus, Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Full-length FOXP3 protein
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 PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The FOXP3 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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
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.
Additional Product Notes	View more applications data for this product in our Scientific Poster Library .
Application References	<ol style="list-style-type: none"> Roncador G, <i>et al.</i> 2005 <i>Eur. J. Immunol.</i> 35:1681. Mayack. S,<i>et al.</i> 2006. <i>J. Immunol.</i>176:2059. J. Immunol Yang ZZ, <i>et al.</i> 2006. <i>Blood</i> 107:3639. Gavin MA, <i>et al.</i> 2006. <i>P. Natl. Acad. Sci. USA</i> 103:6659.
(PubMed link indicates BioLegend citation)	

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RRID

AB_492981 (BioLegend Cat. No. 320007)
 AB_492980 (BioLegend Cat. No. 320008)

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
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Transcription Factors
Molecular Family	Nuclear Markers

Antigen References

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Regulation

FOXP3 is present at high levels in T regulatory cell can also be induced by T cell activation

Gene ID

[20371](#)

[317382](#)

[50943](#)

Related Protocols

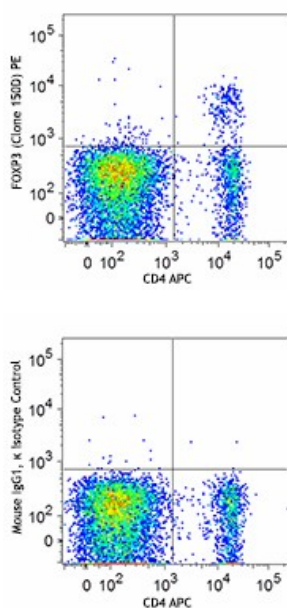
[True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)

[True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)

Other Formats

Purified anti-mouse/rat/human FOXP3, PE anti-mouse/rat/human FOXP3, Alexa Fluor® 488 anti-mouse/rat/human FOXP3, Alexa Fluor® 647 anti-mouse/rat/human FOXP3, True-Nuclear™ Human Treg Flow™ Kit (FOXP3 Alexa Fluor® 488/CD4 PE-Cy5/CD25 PE), True-Nuclear™ Mouse Treg Flow™ Kit (FOXP3 Alexa Fluor® 488/CD4 APC/CD25 PE)

Product Data



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 150D) PE (top) or mouse IgG1, κ PE isotype control (bottom).

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