

# Spark NIR™ 685 anti-human FOXP3

**Catalog # /** 2200650 / 100 tests  
**Size:** 2200645 / 25 tests

**Clone:** 206D

**Isotype:** Mouse IgG1, κ

**Immunogen:** Full-length FOXP3 protein

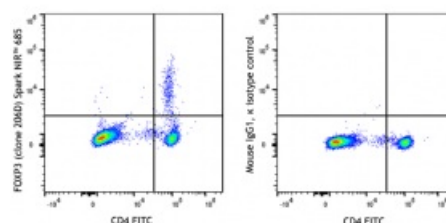
**Reactivity:** Human, Non-human primate

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

**Workshop Number:** 750 under optimal conditions.

**Concentration:** Lot-specific

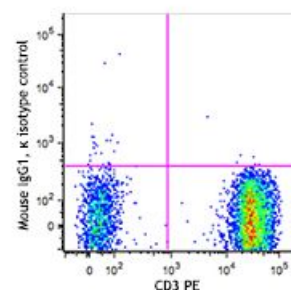


Human peripheral blood lymphocytes were surface stained with CD4 FITC and then treated with True-Nuclear™ Transcription Factor Buffer set. Cells were then stained with anti-human FOXP3 (clone 206D) Spark NIR™ 685 (left) or mouse IgG1, κ Spark NIR™ 685 isotype control (right).

## Applications:

**Applications:** Intracellular Staining for Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



\* Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections<sup>1</sup> and formalin-fixed paraffin-embedded sections<sup>1,8,19-20</sup>, and Western blotting<sup>1</sup>. The binding of 206D to FOXP3 can be partially blocked by 259D, but 206D does not show significant blocking effect on 259D binding.

**Application  
References:**

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6. Tran DQ, et al. 2007. *Blood* doi:10.1182/blood-2007-06-094656. [PubMed](#)
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8. Pillai V, et al. 2008. *Blood* 111:463. [PubMed](#)
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12. Nevala WK, et al. 2009. *Clin Cancer Res.* 15:1931. [PubMed](#)
13. Grant J, et al. 2009. *Cytometry B Clin Cytom.* 76:69. [PubMed](#)
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15. Kmiecik M, et al. 2009. *J. Transl. Med.* 7:89. (ICFC) [PubMed](#)
16. Hartigan-O'Connor DJ, et al. 2007. *J Exp Med.* 204:2679. [PubMed](#)
17. Raghaven S, et al. 2009. *Ann Rheum Dis.* 68:1908. [PubMed](#)
18. Hodi FS, et al. 2014. *Cancer Immunol Res.* 2:632.(IHC) [PubMed](#)
19. Szoros E, et al. 2015. *Clin Cancer Res.* 21:2840.(IHC) [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 δ2) lacking exon 2. The 206D antibody recognizes human FOXP3 epitope in the region of amino acids 105-235.

**Antigen  
References:**

1. Hori S, et al. 2003. *Science* 299:1057.
2. Gandhi R, et al. 2010. *Nat. Immunol.* 11:846.