TECHNICAL DATA SHEET

CyFlow™ FoxP3 PE

Anti-Hu/Ms; Clone 3G3

REF **BV376397**

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For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	FoxP3
Alternative Names	foxp3 ,Forkhead box P3 ,IPEX ,JM2 ,MGC141961 ,MGC141963 ,PIDX ,XPID
Clone	3G3
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human | Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.5 mg/mL]
Immunogen	Full-length His-tagged recombinant murine FoxP3

Specificity

The mouse monoclonal antibody 3G3 recognizes N-terminal region of FoxP3 antigen, a 47-55 kDa transcription factor, which is the master regulator in the development and function of regulatory T cells.

Application

The reagent is designed for flow cytometry analysis. Suggested working usage is 3 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.09% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

FoxP3 (Forkhead box protein 3), a highly conserved forkhead/winged-helix transcription factor, plays a crucial role in maintaining immune homeostasis by governing the development and function of regulatory T cells. It is constitutively expressed at high level in CD25+ CD4+ Treg cells and at low level in a CD25- CD4+ Treg cell subset. Defects in gene encoding FoxP3 protein cause the scurfy phenotype in mice, and in human the IPEX syndrome (immune dysfunction, polyendocrinopathy, enteropathy, X-linked syndrome), also known as X-linked autoimmunity-allergic dysregulation (XLAAD) syndrome.

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at http://www.sysmex-partec.com/services, or at https://us.sysmex-flowcytometry.com/ (U.S. customers only).

References

• Gavin MA, Torgerson TR, Houston E, DeRoos P, Ho WY, Stray-Pedersen A, Ocheltree EL, Greenberg PD, Ochs HD, Rudensky AY: Single-cell analysis of normal and FOXP3-mutant human T cells: FOXP3 expression without regulatory T cell development. Proc Natl Acad Sci USA. 2006 Apr 25; 103(17):6659-64. < PMID: 16617117 >

• Elkord E: Novel therapeutic strategies by regulatory T cells in allergy. Chem Immunol Allergy. 2008; 94:150-7. < PMID: 18802345 >

• Kuhn A, Beissert S, Krammer PH: CD4(+)CD25 (+) regulatory T cells in human lupus erythematosus. Arch Dermatol Res. 2009 Jan; 301(1):71-81. < PMID: 18985367 >

• Barnes MJ, Powrie F: Regulatory T cells reinforce intestinal homeostasis. Immunity. 2009 Sep 18; 31(3):401-11. < PMID: 19766083 >

• Lal G, Bromberg JS: Epigenetic mechanisms of regulation of Foxp3 expression. Blood. 2009 Oct 29; 114(18):3727-35. < PMID: 19641188 >

• Bettini M, Vignali DA: Regulatory T cells and inhibitory cytokines in autoimmunity. Curr Opin Immunol. 2009 Dec; 21(6):612-8. < PMID: 19854631 >

• Law JP, Hirschkorn DF, Owen RE, Biswas HH, Norris PJ, Lanteri MC: The importance of Foxp3 antibody and fixation/permeabilization buffer combinations in identifying CD4+CD25+Foxp3+ regulatory T cells. Cytometry A. 2009 Dec; 75(12):1040-50. < PMID: 19845018 >

Symbols

	Reference number		Contains sufficient for <n> tests
	For research use only		Temperature limit
	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier