

PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

FoxP3

PURE	RUO	REF	IQP-651P
R-PE	RUO	REF	IQP-651R
APC	RUO	REF	IQP-651A

RUO **For Research Use Only**



Description

Clone 3G3

Isotype Murine IgG1

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

Species Human, Mouse

Immunogen Full-length His-tagged recombinant murine FoxP3

Summary 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.

Applications FC (intracellular staining), WB. Determining optimal working dilutions by titration test.

Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent performance can be affected by the use of anticoagulants.



Handling and Storage

Antibodies are supplied in phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4. Store the vials at 2-8°C. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1. Bettini M, Vignali DA: Regulatory T cells and inhibitory cytokines in autoimmunity. *Curr Opin Immunol*. 2009 Dec;21(6):612-8.
2. Barnes MJ, Powrie F: Regulatory T cells reinforce intestinal homeostasis. *Immunity*. 2009 Sep 18;31(3):401-11.
3. Kuhn A, Beissert S, Krammer PH: CD4(+)CD25 (+) regulatory T cells in human lupus erythematosus. *Arch Dermatol Res*. 2009 Jan;301(1):71-81.
4. Elkord E: Novel therapeutic strategies by regulatory T cells in allergy. *Chem Immunol Allergy*. 2008;94:150-7.
5. Lal G, Bromberg JS: Epigenetic mechanisms of regulation of Foxp3 expression. *Blood*. 2009 Oct 29;114(18):3727-35.
6. 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 U S A*. 2006 Apr 25;103(17):6659-64.
7. 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.

Explanation of used symbols



REF



RUO

LOT



Consult instructions for use

Catalogue number

Sufficient for

Caution, consult accompanying document

Keep away from (sun)light

Biological risks

Temperature limitation (°C)

For Research Use Only

Batch code

Use by yyyy-mm-dd

Manufacturer

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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