## FOXP3 Monoclonal Mouse Antibody (3G3)



## **Product Description**

Recognizes a protein of 47-55 kDa, which is identified as FOXP3. Its precise epitope is not known, but it has been mapped to the N-terminal portion (amino acids 2-136) of the protein. The FOX family of transcription factors is a large group of proteins that share a common DNA binding domain termed a winged-helix or forkhead domain. During early development, FOXP1 and FOXP2 are expressed abundantly in the lung, with lower levels of expression in neural, intestinal and cardiovascular tissues, where they act as transcription repressors. FOXP1 is widely expressed in adult tissues, while neoplastic cells often exhibit a dramatic change in expression level or localization of FOXP1. Mutations in FOXP3 gene cause IPEX, a fatal, X-linked inherited disorder characterized by immune dysregulation. The FOXP3 protein is essential for normal immune homeostasis. Specifically, FOXP3 represses transcription through a DNA binding forkhead domain, thereby regulating T cell activation.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0645, Anti-FOXP3 (3G3)

## Product attributes

Product attributes				
Antibody number	#0645			
Antibody reactivity (target)	FOXP3			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	3G3			
Isotype	IgG1, kappa			
Molecular weight	47-55 kDa			
Synonyms	JM2, AIID, DIETER, IPEX, MGC141961, MGC141963, PIDX, XPID, FOXP3delta7, forkhead box protein P3, immune dysregulation, polyendocrinopathy, enteropathy, X-linked, immunodeficiency, polyendocrinopathy, enteropathy, X-linked, scurfin			
Human gene symbol	FOXP3			
Entrez gene ID	50943			
SwissProt	Q9BZS1			
Unigene	247700			
Immunogen	Full-length His-tagged mouse FOXP3 protein			
Antibody target cellular localization	Nucleus & cytoplasm			
Species reactivity	Human, Monkey, Mouse			
Expected antibody applications	Flow (intracellular) (published for clone)			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mlL, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Optimal dilution for a specific application should be determined by user			
Positive control	Tonsil, lymph node or Breast carcinoma			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Antibody research areas	Cancer, Developmental biology, Endocrinology, Transcription factors			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in			

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Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- 1. PNAS USA (2006) 103(17): 6659-6664. (Flow; epitope mapping)
- Cytometry Part A (2009) 75A: 1040-1050. (Flow; comparison of anti-FOXP3 clones and fixation methods)