

Regulatory T Cells

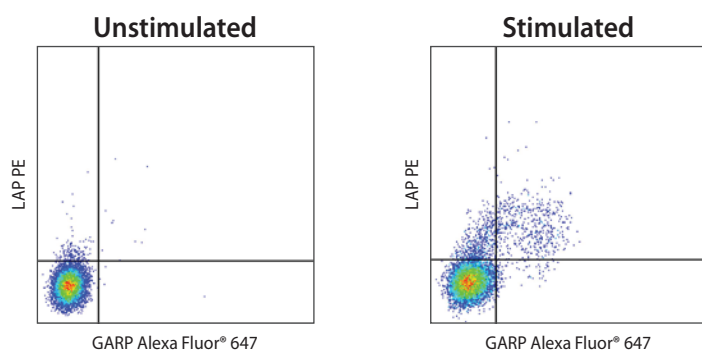
NEW Tools for Regulatory T Cell Research

Regulatory T cells (Tregs) are critical to the maintenance of immune cell homeostasis, as evidenced by the catastrophic consequences of genetic or physical ablation of the Treg population. Specifically, Tregs maintain order in the immune system by enforcing a dominant negative regulation on other immune cells. The ability to identify these cells at the single cell level by their expression of the Foxp3 transcription factor suggests the importance of identifying other Treg surface markers. Two of these molecules, CD39 and CD73, possess enzymatic activity that may

promote the reduction of toxic extracellular ATP levels in inflamed tissue. Additionally, expression of CD101 on mouse Treg cells has been shown to correlate with the potency of suppression mediated by the regulatory T cell population. Understanding the mechanisms by which Tregs exert their influence is an area of intense research and will likely define parameters that can be manipulated therapeutically to intervene in several disease processes.

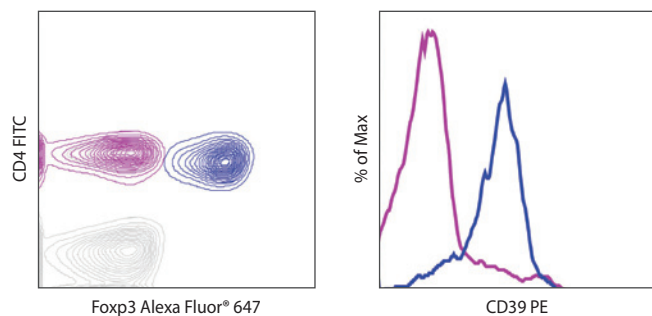
Reference: Fernandez, I., et al. 2007. *J. Immunol.* 179:2808-2814.

Human GARP/LAP



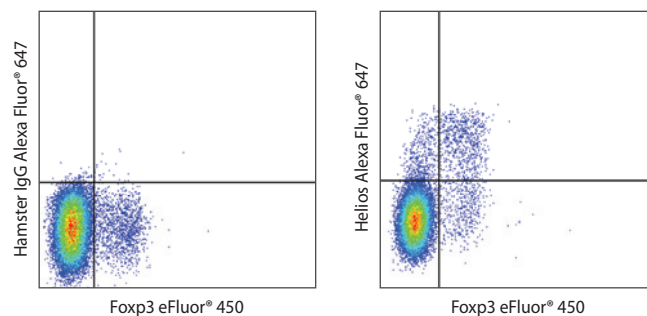
Human GARP: Normal human peripheral blood cells were unstimulated or stimulated for 24 hr with Anti-Human CD3, Anti-Human CD28, and Human IL-2 Recombinant Protein. Cells were surface stained with Anti-Human CD4 FITC, Anti-Human GARP Alexa Fluor® 647 (cat. no. 51-9882), and Anti-Human LAP PE (cat. no. 12-9829). Data shown are gated on CD4+ lymphocytes.

Mouse CD39



Mouse CD39: Mouse splenocytes were stained with 0.125 μ g Anti-mouse CD39 PE (24DMS1) (cat. no. 12-0391) and 0.125 μ g Anti-mouse CD4 FITC (GK1.5) (cat. no. 11-0041) and subsequently intracellularly with 1 μ g Anti-mouse Foxp3 Alexa Fluor® 647 (FJK-16s) (cat. no. 51-5773) using the Foxp3 Staining Buffer Set (cat. no. 00-5523). The histogram (right panel) demonstrates staining of CD39 on CD4+Foxp3- cells (purple histogram) and CD4+Foxp3+ cells (blue histogram) as gated in the contour plot (left panel).

Anti-Helios



Anti-Helios: C57Bl/6 lymph node cells were surface stained with Anti-Mouse CD4 PerCP-eFluor® 710 (cat. no. 46-0042). Cells were then fixed and permeabilized using the Foxp3 Staining Buffer Set (cat. no. 00-5523) followed by intracellular staining with Anti-Mouse/Rat Foxp3 eFluor® 450 (cat. no. 48-5773) and 0.06 μ g of Armenian Hamster IgG Isotype Control Alexa Fluor® 647 (cat. no. 51-4888) (left) or 0.06 μ g of Anti-Helios Alexa Fluor® 647 (cat. no. 51-9883) (right). CD4+ cells in the lymphocyte gate were used for analysis.

FEATURING

ANTIBODIES

- CD39 (h, m)
- CD73 (h) **NEW**
- Foxp3 (h, m, r)
- FR4 (m) **NEW**
- GARP (h, m) **NEW**
- Helios (c, h, r) **NEW**
- LAP (h) **NEW**
- TIGIT (h) **NEW**

ELISA KITS

- IL-10 High Sensitivity ELISA (h)
- IL-10 Ready-SET-Go! ELISA® (h, m)
- LAP Ready-SET-Go! ELISA® (h) **NEW**
- TGF β 1 Ready-SET-Go! ELISA® (h, m) **NEW**

FLOWCYTOMIX™ MULTIPLEX

- IL-10 (h, m)
- TGF β 1 (h, m)

h=human, m=mouse, r=rat, c=canine

Regulatory T Cell Reagents

Mouse	Clone	Cat. No.	FlowCytomix™ Multiplex	Platinum ELISA®	Instant ELISA®	High Sensitivity ELISA®	ELISA Ready-SET-Go!®	ELISPOT Ready-SET-Go!®	Single-use ELISA Standards	Recombinant	Carrier-free Recombinant	Purified	Functional Grade™ Purified	Biotin	eFluor® 450	eFluor® 605NC	eFluor® 650NC	FITC	Alexa Fluor® 488	PE	PE-Cy5	PerCP-eFluor® 710	PE-Cy7	PerCP-Cy5.5	APC	Alexa Fluor® 647 / eFluor® 660	Alexa Fluor® 700	APC-eFluor® 780
CD4	GK1.5	0041										•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	RM4-5	0042										•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CD25	PC61.5	0251										•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	eBio7D4	0252												•					•									•
	eBio3C7	0253													•				•									•
CD39	24DMS1	0391										•	•							•		•	•				•	
CD127/IL-7Ra	A7R34	1271										•	•	•	•			•	•	•	•		•	•	•	•	•	•
CTLA-4/CD152	UC10-4B9	1521										•	•					•	•	•	•		•	•	•	•	•	•
Foxp3	FJK-16s (reacts w/ rat)	5773										•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	NRRF-30	4771										•								•								
	eBio7979	7979										•								•							•	
	150D/E4 (reacts w/ rat)	4774										•							•	•						•		
FR4	eBio12A5	5445										•		•				•		•			•		•			
GARP	YGIC86	9891												•					•			•			•			
IL-10	JES5-16E3	7101										•	•					•	•	•				•	•	•	•	•
	JES5-2A5	7102											•	•					•	•	•			•	•	•	•	•
	--	8101							•	•	•																	
	--	7104																										
	--	7804																										
	--	BMS614			•	•																						
TGFB-1	--	BMS8614/2FF	•																									
	--	BMS8608FF	•																									
	--	BMS608/3		•																								
		8350																										
Human	Clone	Cat. No.																										
CD4	OKT4 (reacts w/ NHP)	0048										•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	RPA-T4	0049										•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
	SK3	0047												•				•	•	•	•		•	•	•	•	•	•
CD25	BC96 (reacts w/ NHP)	0259										•		•	•			•	•	•		•	•	•	•	•	•	
CD39	eBioA1	0399										•						•	•	•		•	•	•	•	•	•	
CD73	AD2	0739																•	•	•				•				
CD101	BB27	1019										•		•					•			•			•			
CD127/IL-7Ra	eBioRDR5	1278										•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
CTLA-4/CD152	14D3	1529										•	•	•					•	•	•		•	•	•	•	•	•
Foxp3	PCH101 (reacts w/ NHP)	4776										•		•	•			•	•	•	•		•	•	•	•	•	•
	236A/E7	4777										•		•	•			•	•	•	•			•	•	•	•	•
	eBio7979	7979										•							•	•	•				•	•	•	•
	150D/E4	4774										•							•	•	•					•	•	•
GARP	G14D9	9882																	•							•		
Helios	22F6 (reacts w/canine & rat)	9883																								•		
IL-10	JES3-9D7 (reacts w/ NHP)	7108										•	•		•				•	•					•	•	•	•
	JES3-12G8	7109												•														
	--	8109								•	•	•																
	--	7106																										
	--	7805																										
	--	BMS215			•	•	•																					
LAP	--	BMS8215FF	•																									
	FNLAP	9829																		•								
	VB3A9	9823											•															
	--	51302																										
TIGIT	MBSA43	9500										•								•								
TGFB-1	--	BMS249		•	•																							
	--	BMS8249FF	•																									
	--	8350																										

All designated trademarks used are the property of their respective owners.

TOLL FREE 888.999.1371 | TEL 858.642.2058 | FAX 858.642.2046 | contact@eBioscience.com | www.eBioscience.com

Q211079b_Treg_0511