Synaptic Systems

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GARP

Cat.No. 221 111; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: not recommended **IP**: not tested yet **ICC**: not tested yet **IHC**: not tested yet **IHC-P/FFPE**: not tested yet **FACS**: yes
Clone	272G6
Subtype	IgG3 (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 296 to 308 from human GARP (UniProt Id: Q14392)
Epitop	Epitop: AA 296 to 308 from human GARP (UniProt Id: Q14392)
Reactivity	Reacts with: human (Q14392). Other species not tested yet.
Specificity	Specific for GARP.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Regulatory T-cells (T_{reg}-cells) are involved in the homeostasis of immune reactions and tolerance. These specialized T-cells suppress auto-reactive cells and inhibit autoimmunity. Development and function of T_{reg}-cells depend on the expression of the transcription factor FOX3P.
The orphan receptor **GARP**, also referred to as **LRRC 32**, is exclusively found on T_{reg}-cells upon stimulation with anti-CD3/IL-2 or anti-CD3/anti-CD28/IL-2. Additionally it has been shown, that ectopic GARP expression strongly induces FOXP3.

Selected References SYSY Antibodies

Regulatory T cells with reduced repressor capacities are extensively amplified in pulmonary sarcoid lesions and sustain granuloma formation.
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GARP: a key receptor controlling FOXP3 in human regulatory T cells.
Probst-Kepper M, Geffers R, Kröger A, Viegas N, Erck C, Hecht HJ, Lünsdorf H, Roubin R, Moharregh-Khiabani D, Wagner K, Ocklenburg F, et al.
Journal of cellular and molecular medicine (2009) 13(9B): 3343-57. **FACS**

Monoclonal antibodies against GARP/TGF-β1 complexes inhibit the immunosuppressive activity of human regulatory T cells in vivo.
Cuende J, Liénart S, Dedobbeleer O, van der Woning B, De Boeck G, Stockis J, Huygens C, Colau D, Somja J, Delvenne P, Hannon M, et al.
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Selected General References

Treg-therapy allows mixed chimerism and transplantation tolerance without cytoreductive conditioning.
Pilat N, Baranyi U, Klaus C, Jaeckel E, Mpofu N, Wrba F, Golshayan D, Muehlbacher F, Wekerle T
American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons (2010) 10(4): 751-62.

The Tregs' world according to GARP.
Battaglia M, Roncarolo MG
European journal of immunology (2009) 39(12): 3296-300.

Identification of a regulatory T cell specific cell surface molecule that mediates suppressive signals and induces Foxp3 expression.
Wang R, Wan Q, Kozhaya L, Fujii H, Unutmaz D
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CD4+CD25+FoxP3+ regulatory T cells in autoimmune diseases.
Valencia X, Lipsky PE
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