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# **TECHNICAL DATA SHEET** FITC Anti-Human GARP (GARP5)

Catalog Number: 35-9882

PRODUCT INFORMATION

Contents: FITC Anti-Human GARP (GARP5)

Isotype: Mouse IgG1

Concentration: 5 uL (0.5 ug)/test

Clone: GARP5

Reactivity: Human

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2

# DESCRIPTION

The GARP5 antibody reacts with human GARP, also known as LRRC32 or Garpin, an 80 kDa transmembrane protein which acts as a receptor for the latent form of TGF-beta 1 (pro-TGF-beta), preventing its secretion. Specifically, GARP is reported to associate with the pro-domain of TGF-beta 1, known as latency-associated peptide (LAP), which must be cleaved to release the biologically active cytokine. The putative role of GARP in sequestering the TGF-beta is important for regulating its activity, as TGF-beta signaling is involved in development and function of Th17, Treg and many other immune cell types. GARP expression has been shown on platelets and at high levels on Foxp3+ Treg cells, where it is proposed to be a phenotypic identifier for activated human Treg cells. The GARP5 antibody may be used for analysis of human GARP by flow cytometry, immunoprecipitation and Western blotting. Please choose the appropriate format for each application.

## **PREPARATION & STORAGE**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

# **APPLICATION NOTES**

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10e5 to 1x10e8 cells.

## REFERENCES

Wang I, Zhu J, Dong X, Shi M, Lu C, and Springer TA. 2012. Mol. Biol. Cell. 23: 1129 - 1139. (Flow cytometry, Immunoprecipitation, Western blot).

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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Human GARP (GARP5) FITC

Untransfected (left) or GARP transfected (right) cells were stained with 5 uL (0.5 ug) FITC Anti-Human GARP (35-9882) (solid line) or 0.5 ug FITC Mouse IgG1 isotype control (dashed line).