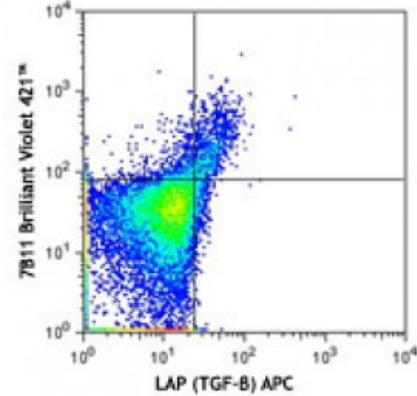


**Brilliant Violet 421™ anti-human GARP (LRRC32)**

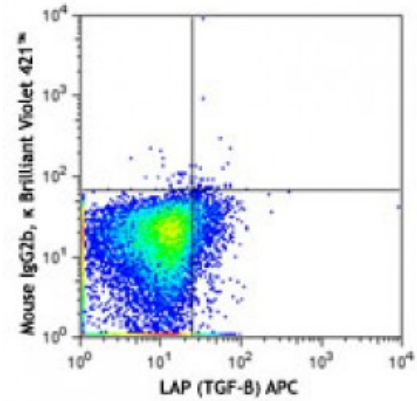
**Catalog # / Size:** 2362545 / 25 tests  
**Clone:** 7B11  
**Isotype:** Mouse IgG2b, κ  
**Immunogen:** LRRC32-DNA vaccination  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).  
**Concentration:** Lot-specific



Human peripheral mononuclear blood cells were stimulated with CD3, CD28 and recombinant human IL-2 for 24 hours and then stained with CD4 PerCP, LAP (TGF-β) APC and GARP (clone 7B11) Brilliant Violet 421™ (top) or mouse IgG2b, κ Brilliant

**Applications:**

**Applications:** Flow Cytometry  
**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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U.S. Patent(s), pending patent applications and foreign equivalents.

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**Description:** Glycoprotein A Repetitions Predominant (GARP), also known as leucine rich repeat containing 32 (LRC32), is a 80 kD type I membrane glycoprotein with 20 leucine rich repeats in the extracellular portion of the protein. GARP was found on the surface of megakaryocytes, platelets, and activated Tregs (CD4+, CD25+, FoxP3+ cells) and serves as a receptor for latent TGF- $\beta$ . Evidence suggests that GARP may play a role in controlling suppressor function of Tregs. A mutation in GARP has been reported in a large Samaritan kindred with Usher syndrome type 1, an autosomal recessive disease characterized by profound congenital sensorineural deafness, vestibular dysfunction, and progressive visual loss. In addition, it has been found that GARP mRNA is highly amplified in different tumors, which indicates that tumor cells may use GARP to express TGF- $\beta$  or to capture TGF- $\beta$  from their surroundings, resulting in local suppression of anti-tumor immune responses or the induction of Tregs.

**Antigen References:**

1. Ollendorff V, *et al.* 1994. *Cell. Growth Differ.* 5:213.
2. Stockis J, *et al.* 2009. *Eur. J. Immunol.* 39:3315.
3. Wang R, *et al.* 2009. *P. Natl. Acad. Sci. USA* 106:13439.
4. Tran DQ