Mouse LRRC32/GARP APC-conjugated Antibody

Monoclonal Rat IgG_1 Clone # 725226

Catalog Number: FAB62291A

100 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse LRRC32/GARP in direct ELISAs. In direct ELISAs, approximately 50% cross-reactivity with recombinant human (rh) LRRC32 is observed and no cross-reactivity with rhLRRC3, rhLRRC4, or rhNGL-3/LRRC4B is observed.
Source	Monoclonal Rat IgG_1 Clone # 725226
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse LRRC32/GARP Ile18-Asn628 Accession # NP_001106850
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

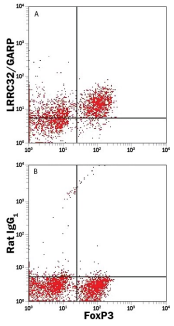
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of LRRC32/GARP in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stimulated with anti-CD3/anti-CD28, Recombinant Mouse IL-2 (Catalog # 402-ML) and TGF-beta for 3 days to induce regulatory T cell differentiation. Cells were stained with Rat Anti-Mouse CD4 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB554F) and either (A) Rat Anti-Mouse LRRC32/GARP APC-conjugated Monoclonal Antibody (Catalog # FAB62291A) or (B) Rat IgG_1 Allophycocyanin Isotype Control (Catalog # IC005A). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Leucine-rich Repeat Protein 32 (LRRC32), also known as GARP (Glycoprotein A Repetitions Predominant), is an 77-80 kDa type I transmembrane glycoprotein. Mature mouse LRRC32 consists of a 608 amino acid (aa) extracellular domain (ECD) that contains 22 leucine-rich repeats, followed by a 21 aa transmembrane segment, and a 14 aa cytoplasmic domain. Within the ECD, mouse LRRC32 shares 80 and 94% aa sequence identity with human and rat LRRC32, respectively. LRRC32 is expressed on hepatic stellate cells and on adult platelets. Among T cells, it is selectively expressed on activated FOXP3+ regulatory T cells (Treg). LRRC32 expression promotes the acquisition of a Treg phenotype that is characterized by reduced cellular proliferation and cytokine secretion, plus the capacity to suppress the proliferation of naïve T cells. LRRC32 binds directly to the TGF-β latency associated peptide (LAP) and, in association with αVβ8 Integrin, mediates the activation and release of TGF-β from the surface of activated Treg cells. The presentation of TGF-β on Tregs contributes to their ability to suppress naïve T cell proliferation.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956