

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse LRRC32/GARP in direct ELISAs. In direct ELISAs, approximately 20% cross-reactivity with recombinant human (rh) LRRC32 is observed and less than 5% cross-reactivity with rhLRRC3, rhLRRC4, and rhLRRC4B is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse LRRC32/GARP Ile18-Asn628 Accession # NP_001106850
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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 80 kDa type I transmembrane glycoprotein (1). Mature mouse LRRC32 consists of a 608 amino acid (aa) extracellular domain (ECD) that contains 22 leucine-rich repeats, a 21 aa transmembrane segment, and a 14 aa cytoplasmic domain (2-4). Within the ECD, mouse LRRC32 shares 80 and 94% aa sequence identity with human and rat LRRC32, respectively. LRRC32 is widely expressed during embryogenesis and on adult platelets (4, 5). Among T cells, it is selectively expressed on activated FOXP3+ regulatory T cells (Treg) (6-10). LRRC32 expression promotes the acquisition of a Treg phenotype including reduced cellular proliferation, reduced cytokine secretion, and the capacity to suppress the proliferation of naïve T cells (6-8). LRRC32 binds directly to the TGF-β latency associated peptide (LAP) and tethers latent TGF-β on the surface of activated Treg cells (9, 10). The presentation of TGF-β on Tregs contributes to their ability to suppress naïve T cell proliferation (11).

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