

# **Rat Anti-mouse Itgal Monoclonal Antibody**

Rat, Monoclonal (Itgal) Cat. No. DMAB2542RM Lot. No. (See product label)

# **PRODUCT INFORMATION**

**Antigen Description:** Integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide), also known as ITGAL, is a human gene which functions in the immune system. It is involved in cellular adhesion and costimulatory signaling. It is the target of the drug efalizumab.

#### Isotype: IgG2a

**Specificity:** Anti-Mouse CD11a recognizes the alpha subunit of the mouse leukocyte function associated antigen-1 (LFA-1). CD11a/CD18alpha1 beta2 leukocyte integrin is a member of a family of heterodimeric receptors which mediate cellular adhesion reactions.(1) The CD11a LFA-1 antigen is present on >97% thymocytes, >95% blood lymphocytes, 79% bone marrow cells and certain lymphoma and macrophage-like cell lines.

*Clone:* J22/8 *Host animal:* Rat *Source:* Cell culture *Format:* FITC, Liquid *Purification:* Affinity Purified

**Application:** This antibody has applications in flow cytometry, immunoprecipitation and immuno- staining of acetone fixed frozen tissue sections. We recommend using 1µg to stain  $1.0 \times 10^6$  cells in flow cytometric applications. Depending on the particular application, some variance can be expected. Each investigator should determine their own working dilution for individual use. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

# PACKAGING

Concentration: 0.5mg/ml (OD280nm) Buffer: 0.01M PBS, pH 7.4 containing 1% BSA Preservative: 0.09% Sodium azide

Storage: Store at 2-8°C. DO NOT FREEZE.

**Warning:** This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

# ANTIGEN GENE INFORMATION

#### Gene Name: <u>Itgal integrin alpha L [ Mus musculus ]</u> Official Symbol: Itgal

Synonyms: Cd11a; LFA-1; Ly-15; Ly-21; Itgal integrin alpha -L; LFA- 1A; CD11A (p180); OTTMUSP00000041057; OTT-MUSP 00000041058; OTTMUSP00000041059; lymphocyte; antigen 15; CD11 antigen-like family member A; leukocyte adhesion glycoprotein LFA-1 alpha chain; leukocyte function -associated molecule 1 alpha chain; lymphocyte function associated antigen 1, alpha polypeptide

# GenelD: <u>16408</u> mRNA Refseq: <u>NM 008400</u> Protein Refseq: <u>NP 032426</u>

UniProt ID: B7ZN92

*Chromosome Location:* 7 F3; 7 60.0 cM *Pathway:* Cell adhesion molecules (CAMs), organismspecific biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Focal Adhesion, organism-specific biosystem; Hemostasis, organism-specific biosystem; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell, organism-specific biosystem; Integrin cell surface interactions, organism-specific biosystem; Leukocyte transendothelial migration, organismspecific biosystem; Malaria, organism-specific biosystem; Natural killer cell mediated cytotoxicity, organism-specific biosystem; Regulation of actin cytoskeleton, organismspecific biosystem

*Function:* cell adhesion molecule binding; protein complex binding; protein heterodimerization activity; receptor activity

# REFERENCES

1. Wuthrich, R. P., et al., (1991), Cell Immunol., 144:22 2. Nagashima, Takeshi; Matsuda Hideo, Silva Diego G, Petrovsky Nikolai, Konagaya Akihiko, Schönbach Christian, Kasukawa Takeya, Arakawa Takahiro, Carninci Piero, Kawai Jun, Hayashizaki Yoshihide, , (Jan 2004). "FREP: a database of functional repeats in mouse cDNAs" (in eng). Nucleic Acids Res. (England) 32 (Database issue): D471-5.

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