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Product Information

Recombinant Anti-Human itgb1 Antibody Fab Fragment

Cat. No.: **MOM-18410-F(E)**
This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Mouse Antibody Fab Fragment is bind to Human ITGB1, expressed in Chinese Hamster Ovary cells(CHO)

Antigen Description

Integrins alpha-1/beta-1, alpha-2/beta-1, alpha-10/beta-1 and alpha-11/beta-1 are receptors for collagen. Integrins alpha-1/beta-1 and alpha-2/beta-2 recognize the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Integrins alpha-2/beta-1, alpha-3/beta-1, alpha-4/beta-1, alpha-5/beta-1, alpha-8/beta-1, alpha-10/beta-1, alpha-11/beta-1 and alpha-V/beta-1 are receptors for fibronectin. Alpha-4/beta-1 recognizes one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. Integrin alpha-5/beta-1 is a receptor for fibrinogen. Integrin alpha-1/beta-1, alpha-2/beta-1, alpha-6/beta-1 and alpha-7/beta-1 are receptors for lamimin. Integrin alpha-4/beta-1 is a receptor for VCAM1. It recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-9/beta-1 is a receptor for VCAM1, cytotactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytotactin. Integrin alpha-3/beta-1 is a receptor for epiligrin, thrombospondin and CSPG4. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration. Integrin alpha-V/beta-1 is a receptor for vitronectin. Beta-1 integrins recognize the sequence R-G-D in a wide array of ligands. Isoform beta-1B interferes with isoform beta-1A resulting in a dominant negative effect on cell adhesion and migration (in vitro). In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. When associated with alpha-7/beta-1 integrin, regulates cell adhesion and laminin matrix deposition. Involved in promoting endothelial cell motility and angiogenesis. May be involved in up-regulation of the activity of kinases such as PKC via binding to KRT1. Together with KRT1 and GNB2L1/RACK1, serves as a platform for SRC activation or inactivation. Plays a mechanistic adhesive role during telophase, required for the successful completion of cytokinesis.

Specific Activity

Tested positive against native antigen.

Target

ITGB1

Immunogen

Human melanoma V+B2 cell line.

Source

Mouse

Species Reactivity

Human

Type

Fab

Expression Host

CHO

Purity

>95.0% as determined by analysis by SDS-PAGE.

Applications

Suitable for use in FC, IP, ELISA, Neut, FuncS, IF and most other immunological methods.

Storage

Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze/thaw cycles.

ANTIGEN GENE INFOMATION

Gene Name

ITGB1 integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) [Homo sapiens]

Official Symbol

ITGB1

Synonyms

ITGB1; integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12); FNRB, MDF2, MSK12; integrin beta-1; CD29; GPIIA; integrin VLA-4 beta subunit; very late activation protein, beta polypeptide; FNRB; MDF2; VLAB; MSK12; VLA-BETA

Gene ID

3688

mRNA Refseq

NM_002211

Protein Refseq

NP_002202

MIM

135630

UniProt ID

P05556

Chromosome Location

10p11.2

Pathway

Adaptive Immune System, organism-specific biosystem; Angiopoietin receptor Tie2-mediated signaling, organism-specific biosystem; Arf6 trafficking events, organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), conserved biosystem; Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem;

Function

actin binding; alpha-actinin binding; collagen binding; fibronectin binding; glycoprotein binding; integrin binding; laminin binding; peptide binding; protease binding; protein binding; protein domain specific binding; protein heterodimerization activity; protein kinase binding; receptor activity;

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