

ITGB2 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2138b

Product Information

Application	WB, E
Primary Accession	<u>P05107</u>
Other Accession	<u>NP_000202.2</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	534CT6.2.1
Calculated MW	84791

Additional Information

Gene ID	3689
Other Names	Integrin beta-2, Cell surface adhesion glycoproteins LFA-1/CR3/p150, 95 subunit beta, Complement receptor C3 subunit beta, CD18, ITGB2, CD18, MFI7
Target/Specificity	Purified His-tagged ITGB2 protein(Fragment) was used to produced this monoclonal antibody.
Dilution	WB~~1:500~1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ITGB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ITGB2
Synonyms	CD18, MFI7
Function	Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is also a receptor for the secreted form of ubiquitin-like

	protein ISG15; the interaction is mediated by ITGAL (PubMed: <u>29100055</u>). Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin ITGAM/ITGB2 is also a receptor for factor X. Integrin ITGAD/ITGB2 is a receptor for ICAM3 and VCAM1. Contributes to natural killer cell cytotoxicity (PubMed: <u>15356110</u>). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed: <u>11812992</u> , PubMed: <u>28807980</u>). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed: <u>18587400</u>). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed: <u>23775590</u>). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3- mediated activation of TNF primed neutrophils (PubMed: <u>21193407</u>).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Membrane raft; Single-pass type I membrane protein
Tissue Location	Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level) (PubMed:21193407, PubMed:28807980)

Background

The product of this gene belongs to the integrin beta chain family of proteins. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. This gene encodes the integrin beta chain beta 2. A given chain may combine with multiple partners resulting in different integrins. For example, beta 2 combines with the alpha L chain to form the integrin LFA-1, and combines with the alpha M chain to form the integrin Mac-1. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling. Defects in this gene are the cause of leukocyte adhesion deficiency type I (LAD1). Two transcript variants encoding the same protein have been identified for this gene.

References

Gjelstrup, L.C., et al. J. Immunol. 185(7):4154-4168(2010) Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Chen, X., et al. Proc. Natl. Acad. Sci. U.S.A. 107(33):14727-14732(2010) Pliyev, B.K., et al. Biochem. Biophys. Res. Commun. 397(2):277-282(2010)

Images



All lanes : Anti-ITGB2 Antibody at 1:2000 dilution + HL-60 cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 90 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.