

ITGB2 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AW5254

Product Information

Application IHC-P, WB **Primary Accession** P05107 **Other Accession** NP 000202.2 Reactivity Human Host Mouse Clonality Monoclonal **Calculated MW** 84791 Isotype IgG1 **Antigen Source HUMAN**

Additional Information

Gene ID 3689

Antigen Region 39-392

Other Names ITGB2; CD18; MFI7; Integrin beta-2; Cell surface adhesion glycoproteins

LFA-1/CR3/p150, 95 subunit beta; Complement receptor C3 subunit beta;

CD_antigen=CD18; Flags: Precursor

Dilution IHC-P~~1:100~500 WB~~ 1:1000

Target/Specificity Purified His-tagged ITGB2 protein(Fragment) was used to produced this

monoclonal antibody.

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:29100055). 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: 15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed: 11812992, PubMed: 28807980). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed: 18587400). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed: 23775590). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3- mediated activation of TNF primed neutrophils (PubMed:21193407).

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)

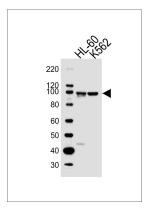
Background

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.

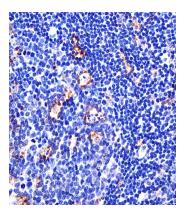
References

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



Western blot analysis of lysates from HL-60,K562 cell line (from left to right), using ITGB2 Antibody(Cat. #AW5254). AW5254 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H. tonsil section using ITGB2 Antibody(Cat#AW5254). AW5254 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Citations

• <u>Differential miRNA expression profiles in human keratinocytes in response to protein kinase C inhibitor.</u>

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.