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ITGB2 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AW5254

Specification

ITGB2 Antibody - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P05107
Other Accession	NP_000202.2
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=85 KDa**
Isotype	**IgG1**
Antigen Source	**HUMAN**

ITGB2 Antibody - 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
WB~~ 1:1000
IHC-P~~1:25

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.

ITGB2 Antibody - 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)

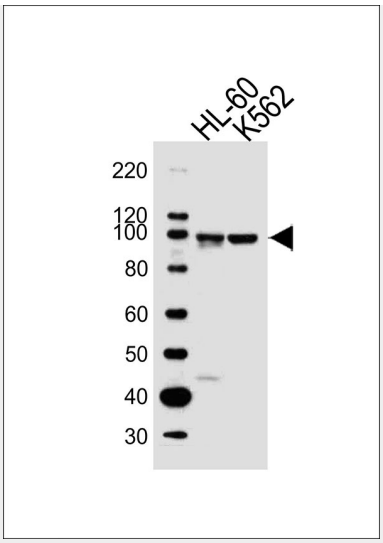
ITGB2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

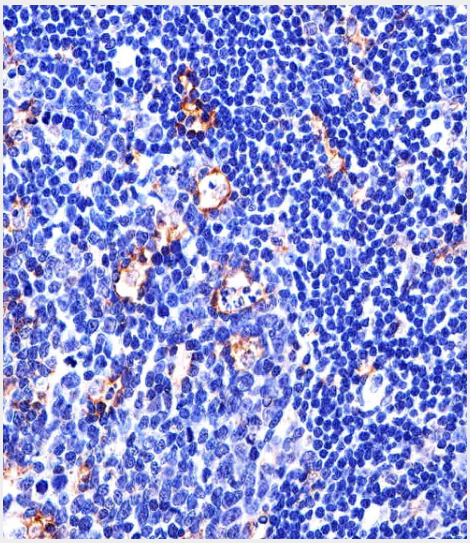
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ITGB2 Antibody - Images

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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.

ITGB2 Antibody - 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.

ITGB2 Antibody - 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)

ITGB2 Antibody - Citations

- Differential miRNA expression profiles in human keratinocytes in response to protein kinase C inhibitor.