

# Integrin $\beta$ 2 Polyclonal Antibody

Catalog # AP73644

## Product Information

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Application	WB, IHC-P
Primary Accession	<a href="#">P05107</a>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	84791

## Additional Information

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Gene ID	3689
Other Names	ITGB2; CD18; MFI7; Integrin beta-2; Cell surface adhesion glycoproteins LFA-1/CR3/p150, 95 subunit beta; Complement receptor C3 subunit beta; CD18
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	ITGB2 ( <a href="#">HGNC:6155</a> )
Synonyms	CD18, MFI7
Function	<p>Integrin ITGAL:ITGB2 is a receptor for ICAM1, ICAM2 and ICAM3 (PubMed:<a href="#">1676048</a>, PubMed:<a href="#">23775590</a>, PubMed:<a href="#">38195629</a>). Integrin ITGAL:ITGB2 is also a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:<a href="#">29100055</a>). 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 (PubMed:<a href="#">10438935</a>, PubMed:<a href="#">8777714</a>, PubMed:<a href="#">9841932</a>). Contributes to natural killer cell cytotoxicity (PubMed:<a href="#">15356110</a>). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:<a href="#">11812992</a>, PubMed:<a href="#">28807980</a>). Triggers neutrophil transmigration during lung injury</p>

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](#)). Integrins ITGAX:ITGB2 functions as a receptor of the erythrocyte-specific adhesion molecule ICAM4 and mediates erythrophagocytosis (PubMed:[16985175](#)). Integrins ITGAX:ITGB2 functions as a receptor of the neuron-specific adhesion molecule ICAM5 ensuring neuron cell-leukocyte adhesion (PubMed:[10741396](#)). Integrin ITGAL:ITGB2 functions as a receptor of ICAM1 by acting as a platform at the immunological synapse to translate TCR engagement and density of the ITGAL ligand ICAM1 into graded adhesion (PubMed:[38195629](#)). Integrin ITGAM:ITGB2/MAC-1 complex functions as a signaling receptor for the ligand receptor ICAM1, ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (PubMed:[1980124](#)). Integrin ITGAL/ITGB2 that functions as a signaling receptor of ICAM2, ensuring leukocyte cell-cell adhesion on resting cells (PubMed:[1676048](#)).

#### 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

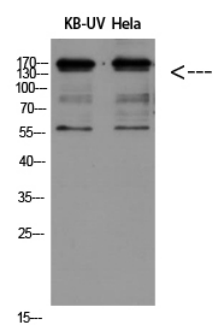
Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes 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](#)).

## Images



Western Blot analysis of HeLa cells using Integrin  $\beta$ 2 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000

Western Blot analysis of KB-UV Hela using Integrin  $\beta$ 2 Polyclonal Antibody diluted at 1:500. Secondary antibody was diluted at 1:20000



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