

### Summary

Production Name	Integrin beta 3 / CD61 (6R14) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

### Immunogen

Gene Name	ITGB3
	BDPLT16; BDPLT2; CD61; GP3A; GPIIIa; HPA 1; HPA 4; Integrin beta 3 (platelet
Alternative Names	glycoprotein IIIa antigen CD61); Integrin beta chain beta 3; Integrin beta-3; ITGB3;
	NAIT; Platelet fibrinogen receptor beta subunit; Platelet glycoprotein IIIa; PTP;
Gene ID	3690.0
SwissProt ID	P05106.

# Application

<b>Dilution Ratio</b>	WB 1:500-1:2000
Molecular Weight	87kDa



## Background

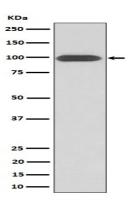
In brain, plays a role in synaptic transmission and plasticity. Involved in the regulation of the serotonin neurotransmission, is required to localize to specific compartments within the synapse the serotonin receptor SLC6A4 and for an appropriate reuptake of serotonin. Controls excitatory synaptic strength by regulating GRIA2-containing AMPAR endocytosis, which affects AMPAR abundance and composition (By similarity). Integrin alpha-V/beta-3 (ITGAV:ITGB3) is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin, vitronectin and von Willebrand factor. Integrin alpha-IIb/beta-3 (ITGA2B:ITGB3) is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrins alpha-IIb/beta-3 and alpha-V/beta-3 recognize the sequence R-G-D in a wide array of ligands. Integrin alpha-IIb/beta-3 recognizes the sequence H-H-L-G-G-G-A-K-Q-A- G-D-V in fibrinogen gamma chain. Following activation integrin alpha- IIb/beta-3 brings about platelet/platelet interaction through binding of soluble fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelial surface. Fibrinogen binding enhances SELP expression in activated platelets (By similarity). ITGAV:ITGB3 binds to fractalkine (CX3CL1) and acts as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:<a href="http://www.uniprot.org/citations/23125415" target=" blank">23125415</a>, PubMed:<a href="http://www.uniprot.org/citations/24789099" target=" blank">24789099</a>). ITGAV:ITGB3 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed: <a href="http://www.uniprot.org/citations/20682778" target=" blank">20682778</a>). ITGAV:ITGB3 binds to FGF1 and this binding is essential for FGF1 signaling (PubMed: <a href="http://www.uniprot.org/citations/18441324"" target=" blank">18441324</a>). ITGAV:ITGB3 binds to FGF2 and this binding is essential for FGF2 signaling (PubMed:<a href="http://www.uniprot.org/citations/28302677" target=" blank">28302677</a>). ITGAV:ITGB3 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed: <a href="http://www.uniprot.org/citations/19578119" target="\_blank">19578119</a>). ITGAV:ITGB3 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed: <a href="http://www.uniprot.org/citations/28873464" target=" blank">28873464</a>). ITGAV:ITGB3 binds to IL1B and this binding is essential for IL1B signaling (PubMed: <a href="http://www.uniprot.org/citations/29030430" target=" blank">29030430</a>). ITGAV:ITGB3 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:<a href="http://www.uniprot.org/citations/18635536" target=" blank">18635536</a>, PubMed:<a href="http://www.uniprot.org/citations/25398877" target="\_blank">25398877</a>). ITGAV:ITGB3 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed: <a href="http://www.uniprot.org/citations/12807887" target=" blank">12807887</a>). In brain, plays a role in synaptic transmission and plasticity. Involved in the regulation of the serotonin neurotransmission, is required to localize to specific compartments within the synapse the serotonin receptor SLC6A4 and for an appropriate reuptake of serotonin. Controls



excitatory synaptic strength by regulating GRIA2-containing AMPAR endocytosis, which affects AMPAR abundance and composition (By similarity). ITGAV:ITGB3 act as a receptor for CD40LG (PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">>31331973</a>).

## **Research Area**

#### **Image Data**



Western blot analysis of Integrin beta 3 / CD61 expression in U-87 MG cell lysate.

#### Note

For research use only.