

Monoclonal Antibody to CD41 / ITGA2B - PE

Alternate names:	GP2B, GPalpha IIb, ITGAB, Integrin alpha-IIb, Platelet membrane glycoprotein IIb
Catalog No.:	SM2035RT
Quantity:	25 Tests
Concentration:	0.1 mg/ml
Background:	<p>Integrin alpha 2b (CD41) is a calcium-dependent, noncovalently associated heterodimer and contains a heavy chain (GPIIb alpha) and a light chain (GPIIb beta) linked by a single disulfide bond. The Integrin alpha 2B chain interacts with the Integrin beta 3 subunit/CD61 to form the platelet glycoprotein complex, gPIIb/IIIa. It is expressed on platelets and megakaryocytes. Ligands for the gPIIb/IIIa heterodimer include fibrinogen, von Willebrand factor, fibronectin, vitronectin, and thrombospondin. The gPIIb/IIIa complex is the major Integrin on platelets and is important for platelet adhesion and aggregation. CD41 is expressed on platelets and megakaryocytes and forms a heterodimer with CD61. CD41/CD61 is important for platelet adhesion and aggregation.</p>
Uniprot ID:	Q9QUM0
NCBI:	NP_034705.2
GeneID:	16399
Host / Isotype:	Rat / IgG1
Clone:	MWReg30
Format:	<p>State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein G. Buffer System: PBS containing 0.09% Sodium Azide as preservative, 5% Sucrose and 1% BSA as stabilizer. Label: PE – R. Phycoerythrin (RPE) Reconstitution: Restore with 1 ml distilled water</p>
Applications:	<p>Flow Cytometry: Use 10 µl of Neat antibody to label 10e6 cells in 100 µl. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
Specificity:	<p>This antibody recognises the integrin alpha IIb subunit CD41. Clone MWReg30 has been reported to inhibit PMA induced aggregation in vitro and to induce hypothermia in vivo. We recommend the use of SM2035A for use in functional studies.</p>
Species Reactivity:	Tested: Mouse.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General References:

1. Nieswandt, B. et al. (1999) Acute Systemic Reaction and Lung Alterations Induced by an Antiplatelet Integrin gpIIb/IIIa Antibody in Mice. *Blood*. 94: 684 - 693.
2. Winter, O. et al. (2010) Megakaryocytes constitute a functional component of a plasma cell niche in the bone marrow. *Blood*. 116: 1867-75.
3. Tamagawa-Mineoka, R. et al. (2007) The role of platelets in leukocyte recruitment in chronic contact hypersensitivity induced by repeated elicitation. *Am J Pathol*. 170: 2019-29.
4. Takayama, M. et al. (2010) Genetic analysis of hierarchical regulation for Gata1 and NF-E2 p45 gene expression in megakaryopoiesis. *Mol Cell Biol*. 30: 2668-80.
5. Larson, M.K. and Watson, S.P. (2006) Regulation of proplatelet formation and platelet release by integrin alpha IIb beta3. *Blood*. 108: 1509-14.
6. Zanzinger, K. et al. (2009) Regulation of triggering receptor expressed on myeloid cells 1 expression on mouse inflammatory monocytes. *Immunology*. 128: 185-95.
7. Lutskiy, M.I. et al. (2007) WASP localizes to the membrane skeleton of platelets. *Br J Haematol*. 139: 98-105.
8. Sullivan, B.P. et al. (2010) Protective and damaging effects of platelets in acute cholestatic liver injury revealed by depletion and inhibition strategies. *Toxicol Sci*. 115: 286-94.

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