

Mouse Anti-CD61/Integrin Beta 3 [2f2]: MC0520, MC0520RTU7

Intended Use: For Research Use Only

Description: CD61 (GPIIIa) or human integrin beta chain beta 3 protein (ITGB3), is a glycoprotein found on megakaryocytes, platelets and their precursors. CD61 antigen plays a role in platelet aggregation and also as a receptor for fibrinogen, fibronectin, von Willebrand factor and vitronectin. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. Integrin beta 3 is found along with the alpha IIb chain in platelets. Integrins are known to participate in cell adhesion as well as cell-surface mediated signaling. The integrin beta 3 chain of the vitronectin receptor and GPIIb/IIIa complex is a 90-110 kDa glycoprotein polypeptide which is expressed on platelets, megakaryocytes, macrophages, osteoclasts, and synovial lining cells. 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. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. This antibody is useful in evaluating the number of megakaryocytes, size, nuclear lobation, and the presence of obviously abnormal forms and micromegakaryocytes in myelodysplastic syndrome, acute myeloid leukemia with multilineage dysplasia, acute megakaryoblastic leukemia, and myeloproliferative neoplasms.

Specifications:

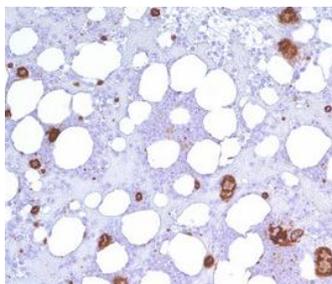
Clone: 2f2
 Source: Mouse
 Isotype: IgG1
 Reactivity: Human
 Localization: Membrane, cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA, and ≤0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
CD61/Integrin Beta 3 Concentrated	MC0520	1 ml
CD61/Integrin Beta 3 Prediluted	MC0520RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Tonsil, bone marrow
 Concentrated Dilution: 10-50
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human bone marrow stained with anti-CD61 using DAB

References

1. Hematopoiesis/erythropoiesis in myocardial infarcts. B I Goldman, J Wurzel. Modern Pathology. 06-01, 2001.
2. Megakaryocytes in myelodysplasia: an immunohistochemical study on bone marrow trephines. S B Fox, J Lorenzen, Histopathology. 07-01, 1990.

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