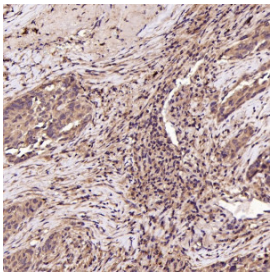
CD41 Antibody AAGH-9 / ITGA2B Monoclonal Antibody [clone AAGH-9] (RQ5218)

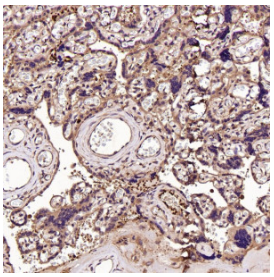
Catalog No.	Formulation	Size
RQ5218	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

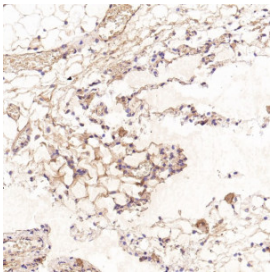
Availability	1-2 weeks
Species Reactivity	Human, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AAGH-9
Purity	Affinity purified
UniProt	P08514
Applications	Western blot: 1:500 Immunohistochemistry: 1:50
Limitations	This CD41 Antibody AAGH-9 / ITGA2B Monoclonal Antibody is available for research use only.



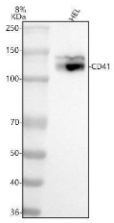
CD41 Antibody AAGH-9 Staining in Human Squamous Carcinoma by IHC. Immunohistochemistry of paraffin-embedded human squamous carcinoma using CD41 Antibody (clone AAGH-9) at a 1:50 dilution shows prominent brown staining within portions of the tumor and surrounding stromal tissue. The signal is readily distinguished from the blue hematoxylin-counterstained nuclei, with heterogeneous staining intensity across the field. This tissue pattern demonstrates detection of the ITGA2B antigen using this ITGA2B Monoclonal Antibody.



CD41 Antibody AAGH-9 Staining in Human Placenta by IHC. Immunohistochemistry of paraffin-embedded human placenta using CD41 Antibody (clone AAGH-9) at a 1:50 dilution shows widespread brown staining associated with placental villous structures. Signal is visible along and within numerous villi, with blue hematoxylin-counterstained nuclei providing clear tissue contrast. The heterogeneous but extensive staining demonstrates detection of CD41/ITGA2B in human placental tissue using this ITGA2B Monoclonal Antibody.



CD41 Antibody AAGH-9 Staining in Rat Pancreas by IHC. Immunohistochemistry of paraffin-embedded rat pancreas using CD41 Antibody (clone AAGH-9) at a 1:50 dilution shows relatively light, localized brown staining within the pancreatic tissue. Signal is present along portions of the tissue architecture and in scattered cellular structures, while much of the field remains lightly stained. The observed cross-species reactivity demonstrates recognition of rat ITGA2B using this ITGA2B Monoclonal Antibody.



CD41 Antibody AAGH-9 Detection in HEL Human Erythroleukemia Cells by WB. Western blot analysis of human HEL erythroleukemia cell lysate using CD41 Antibody (clone AAGH-9) shows a strong, discrete band migrating at approximately 120-130 kDa. The observed signal is consistent with the expected migration range of the glycosylated CD41/ITGA2B protein, which has a predicted molecular weight of approximately 113 kDa before post-translational modification. Minimal additional reactivity is visible across the remainder of the lane, producing a relatively clean detection profile. This result demonstrates recognition of CD41 in HEL cells using this ITGA2B Monoclonal Antibody.

Description

CD41 Antibody AAGH-9 recognizes CD41, a platelet and megakaryocyte surface protein encoded by the ITGA2B gene and also known as integrin alpha 2b. CD41 belongs to the integrin alpha-chain family and associates with integrin beta 3, or CD61, to form the alpha IIb beta 3 heterodimer. This receptor is also commonly called glycoprotein IIb/IIIa and is highly abundant on the platelet surface. Through its ability to bind fibrinogen and other adhesive ligands, alpha IIb beta 3 has an essential role in platelet aggregation and normal hemostasis.

Platelet activation induces conformational changes in alpha IIb beta 3 that increase its affinity for extracellular ligands. Fibrinogen can then bridge receptors on neighboring platelets, supporting platelet aggregation and formation of the hemostatic plug. Ligand engagement also initiates outside-in signaling that contributes to cytoskeletal reorganization, platelet spreading and stabilization of the developing clot. Because of these functions, CD41 is extensively studied in platelet activation, adhesion and thrombus biology.

CD41 is also an established marker of the megakaryocytic lineage. Its expression accompanies megakaryocyte differentiation and platelet production, making a CD41 Antibody useful for studying megakaryopoiesis and identifying cells committed to this hematopoietic lineage. CD41 is additionally used in developmental hematopoiesis research, where expression of ITGA2B can help characterize emerging hematopoietic populations. Pathogenic variants in ITGA2B can impair alpha IIb beta 3 expression or function and are associated with Glanzmann thrombasthenia, an inherited platelet disorder characterized by defective aggregation and bleeding.

Clone AAGH-9 is a rabbit monoclonal antibody directed against human CD41/ITGA2B. The ITGA2B Monoclonal Antibody provides a defined monoclonal reagent for investigating integrin alpha 2b expression and its relationship to platelet and megakaryocyte biology. NSJ Bioreagents offers clone AAGH-9 for research examining CD41 expression, platelet-associated mechanisms and hematopoietic cell differentiation. A CD41 Antibody can provide a useful tool for studying ITGA2B expression and the biological functions associated with the alpha IIb beta 3 integrin receptor.

For broader ITGA2B validation across IHC, western blot and flow cytometry, see our ITGA2B Antibody / Integrin Alpha 2b Antibody page.

Application Notes

Optimal dilution of the CD41 Antibody AAGH-9 / ITGA2B Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human CD41 / ITGA2B was used as the immunogen for the CD41 Antibody AAGH-9.

Storage

Store the CD41 Antibody AAGH-9 at -20oC.

Alternate Names

ITGA2B antibody; Integrin alpha 2b antibody; Integrin alpha IIb antibody; Platelet glycoprotein IIb antibody; GPIIb antibody; CD41b antibody

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