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KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2306

Specification

KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P08648
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted , 115 kDa , observed , 150 kDa KDa**
Gene Name	**ITGA5**
Aliases	**ITGA5; Integrin; Alpha 5 (Fibronectin Receptor,Alpha Polypeptide); VLA5A FNRA; CD49e; Fibronectin Receptor Subunit Alpha; Fibronectin Receptor Alpha Subunit; Integrin Alpha-F; Integrin Alpha-5; VLA-5; Very Late Activation Protein 5; Alpha Subunit; CD49 Antigen-Like Family Member E; CD49e Antigen**
Immunogen	**A synthesized peptide derived from human Integrin alpha 5**

KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**3678**

Other Names
Integrin alpha-5, CD49 antigen-like family member E, Fibronectin receptor subunit alpha, Integrin alpha-F, VLA-5, CD49e, Integrin alpha-5 heavy chain, Integrin alpha-5 light chain, ITGA5 (HGNC:6141), FNRA

KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody - Protein Information

Name ITGA5 (HGNC:6141)

Synonyms FNRA

Function
Integrin alpha-5/beta-1 (ITGA5:ITGB1) is a receptor for fibronectin and fibrinogen. It recognizes the sequence R-G-D in its ligands. ITGA5:ITGB1 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:18635536, PubMed:25398877). ITGA5:ITGB1 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, PubMed:17158881). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed:33962943). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:29030430). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed:31331973).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion

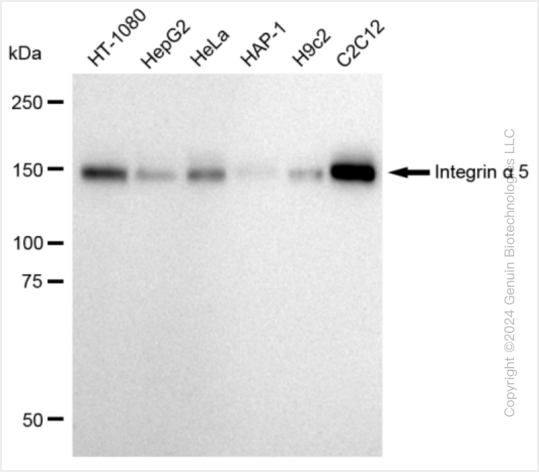
Tissue Location
Expressed in placenta (at protein level).

KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Integrin alpha 5 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Integrin alpha 5 antibody (Cat#AGI2306). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Integrin alpha 5 antibody (Cat#AGI2306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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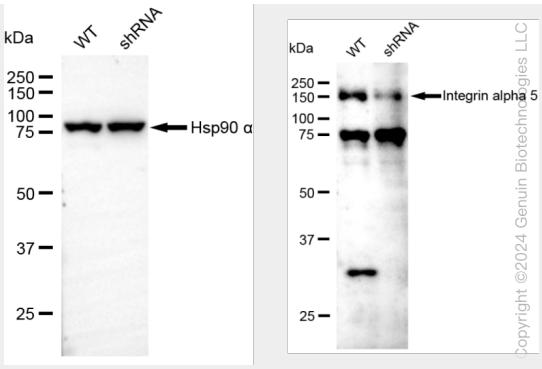
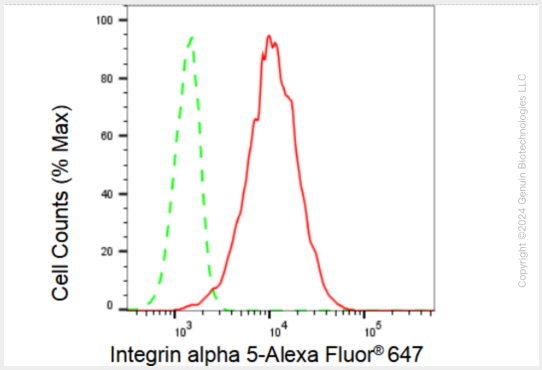
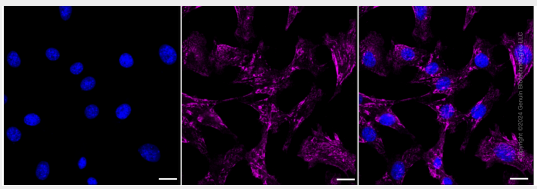


Western blotting analysis using anti-Integrin alpha 5 antibody (Cat#AGI2306). Integrin alpha 5 expression in wild type (WT) and Integrin alpha 5 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Integrin alpha 5 antibody (Cat#AGI2306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Integrin alpha 5 expression in C2C12 cells using Integrin alpha 5 antibody (Cat#AGI2306, 1:2,000). Green, isotype control; red, Integrin alpha 5.



Immunocytochemical staining of C2C12 cells with Integrin alpha 5 antibody (Cat#AGI2306, 1:1,000). Nuclei were stained blue with DAPI; Integrin alpha 5 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.