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ITA6 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1828a

Specification

ITA6 Antibody - Product Information

Application	**IF, IHC-P, FC, WB,E**
Primary Accession	P23229
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,κ**

ITA6 Antibody - Additional Information

Gene ID 3655

Other Names
Integrin alpha-6, CD49 antigen-like family member F, VLA-6, CD49f, Integrin alpha-6 heavy chain, Integrin alpha-6 light chain, Processed integrin alpha-6, Alpha6p, ITGA6

Target/Specificity
ITA6 recombinant protein is used to produce this monoclonal antibody.

Dilution
IF~~1:10~50
IHC-P~~1:10~50
FC~~1:10~50
WB~~1:1000

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ITA6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ITA6 Antibody - Protein Information

Name ITGA6

Function Integrin alpha-6/beta-1 (ITGA6:ITGB1) is a receptor for laminin on platelets (By similarity). Integrin alpha-6/beta-1 (ITGA6:ITGB1) is present in oocytes and is involved in sperm-egg fusion (By similarity). Integrin alpha-6/beta-4 (ITGA6:ITGB4) is a receptor for laminin in

epithelial cells and it plays a critical structural role in the hemidesmosome (By similarity). ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed:20682778). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:22351760). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed:28873464).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid-anchor

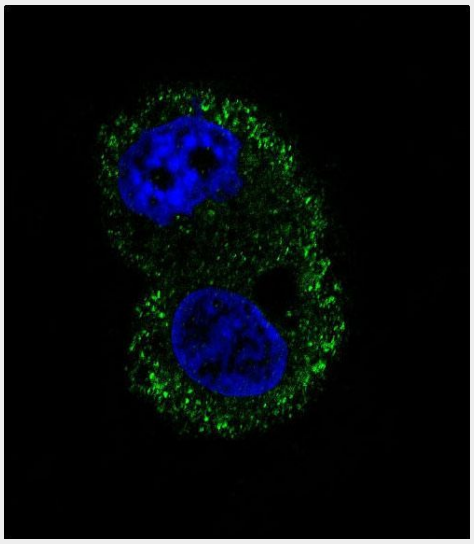
Tissue Location
Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoforms containing segment X1 are ubiquitously expressed. Isoforms containing segment X1X2 are expressed in heart, kidney, placenta, colon, duodenum, myoblasts and myotubes, and in a limited number of cell lines; they are always coexpressed with the ubiquitous isoform containing segment X1. In some tissues (e.g Salivary gland), isoforms containing cytoplasmic segment A and isoforms containing segment B are detected while in others, only isoforms containing one cytoplasmic segment are found (segment A in epidermis and segment B in kidney). Processed integrin alpha-6: Expressed at low levels in normal prostate tissue with elevated levels in prostate cancer tissue (at protein level) (PubMed:15023541)

ITA6 Antibody - Protocols

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

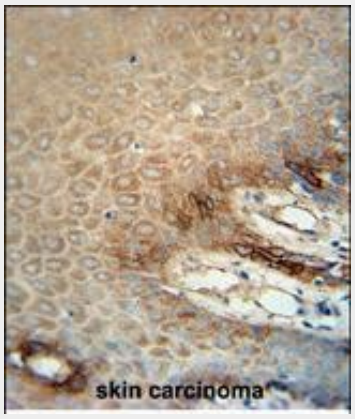
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ITA6 Antibody - Images

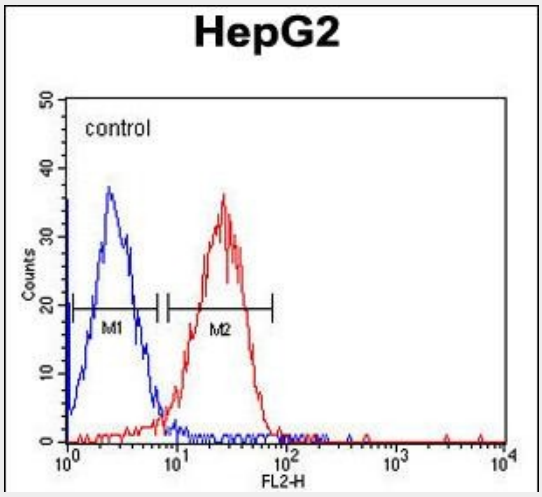


Confocal immunofluorescent analysis of ITA6 Antibody (Cat#AM1828a) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell

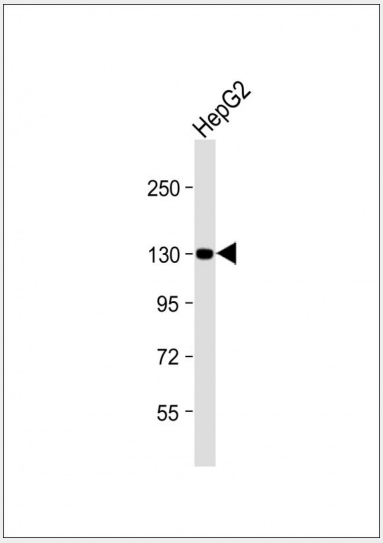
nuclear (blue).



ITA6 Monoclonal Antibody (Cat. #AM1828a) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjµgation of the secondary antibody and DAB staining. This data demonstrates the use of the ITA6 Monoclonal Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



ITA6 Monoclonal Antibody (Cat. #AM1828a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).PE-conjugated goat-anti-mouse secondary antibodies were used for the analysis.



Anti-ITA6 at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 127 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ITA6 Antibody - Background

The ITGA6 protein product is the integrin alpha chain alpha 6. 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. For example, alpha 6 may combine with beta 4 in the integrin referred to as TSP180, or with beta 1 in the integrin VLA-6. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling. Two transcript variants encoding different isoforms have been found for this gene.

ITA6 Antibody - References

Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624. Prostate cancer risk-associated variants reported from genome-wide association studies: Meta-analysis and their contribution to genetic Variation. Kim ST, et al. Prostate, 2010 Jun 16. PMID 20564319. alpha6-integrin subunit plays a major role in the proangiogenic properties of endothelial progenitor cells. Bouvard C, et al. Arterioscler Thromb Vasc Biol, 2010 Aug. PMID 20508204. Common polymorphisms in ITGA2, PON1 and THBS2 are associated with coronary atherosclerosis in a candidate gene association study of the Chinese Han population. Wang Y, et al. J Hum Genet, 2010 Aug. PMID 20485444. Usage of heparan sulfate, integrins, and FAK in HPV16 infection. Abban CY, et al. Virology, 2010 Jul 20. PMID 20441998.

ITA6 Antibody - Citations

- Nanoparticle biointerfacing by platelet membrane cloaking.