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ITGB4 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2304a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P16144
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	10B10D5
Isotype	IgG1
Calculated MW	202167
Description	Integrins are heterodimers comprised of alpha and beta subunits, that are noncovalently associated transmembrane glycoprotein receptors. Different combinations of alpha and beta polypeptides form complexes that vary in their ligand-binding specificities. Integrins mediate cell-matrix or cell-cell adhesion, and transduced signals that regulate gene expression and cell growth. This gene encodes the integrin beta 4 subunit, a receptor for the laminins. This subunit tends to associate with alpha 6 subunit and is likely to play a pivotal role in the biology of invasive carcinoma. Mutations in this gene are associated with epidermolysis bullosa with pyloric atresia. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.
Immunogen	Purified recombinant fragment of human ITGB4 (AA: 1619-1822) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	3691
Other Names	Integrin beta-4, GP150, CD104, ITGB4
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ITGB4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ITGB4
Function	Integrin alpha-6/beta-4 is a receptor for laminin. Plays a critical structural role in the hemidesmosome of epithelial cells. Is required for the regulation of keratinocyte polarity and motility. 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. Cell junction, hemidesmosome. Note=Colocalizes with DST at the leading edge of migrating keratinocytes
Tissue Location	Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D is also expressed in colon and placenta Isoform beta-4E is also expressed in epidermis, lung, duodenum, heart, spleen and stomach

References

1.PLoS One. 2012;7(4):e32060. 2.J Cell Biochem. 2010 Jun 1;110(3):718-24.

Images

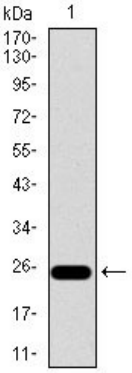


Figure 1: Western blot analysis using ITGB4 mAb against human ITGB4 recombinant protein. (Expected MW is 24 kDa)

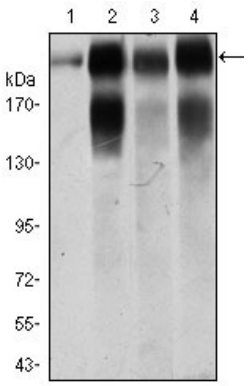


Figure 2: Western blot analysis using ITGB4 mouse mAb against A549 (1), A431 (2), MCF-7 (3) and SW620 (4) cell lysate.

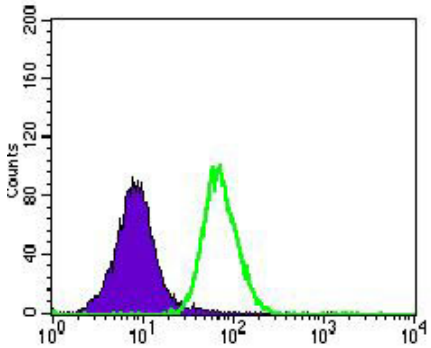


Figure 3: Flow cytometric analysis of A549 cells using ITGB4 mouse mAb (green) and negative control (purple).

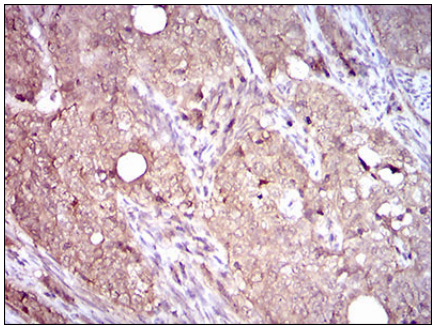


Figure 4: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ITGB4 mouse mAb with DAB staining.

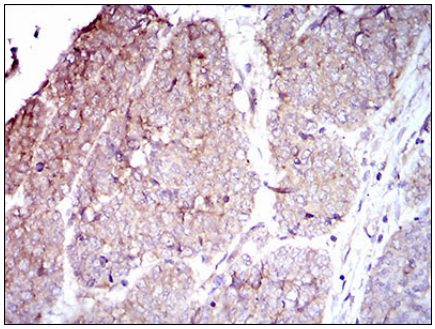


Figure 5: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using ITGB4 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.