

Product Name: Integrin β 4 (phospho Tyr1510) Rabbit Polyclonal Antibody**Catalog #: APRab04857**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	202kDa

Antigen Information

Gene Name	ITGB4
Alternative Names	ITGB4; Integrin beta-4; GP150; CD antigen CD104
Gene ID	3691.0
SwissProt ID	P16144
Immunogen	The antiserum was produced against synthesized peptide derived from human ITGB4 around the phosphorylation site of Tyr1510. AA range:1481-1530

Background

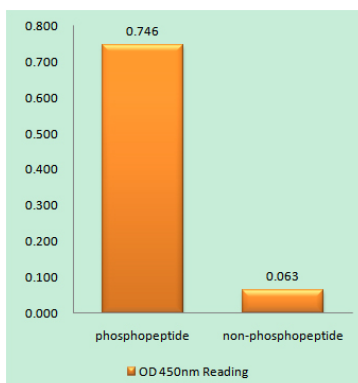
Integrins are heterodimers comprised of alpha and beta subunits, that are noncovalently associated transmembrane

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. [provided by RefSeq, Jul 2008],disease:Defects in ITGB4 are a cause of epidermolysis bullosa letalis with pyloric atresia (EB-PA) [MIM:226730]; also known as junctional epidermolysis bullosa with pyloric atresia (PA-JEB) or aplasia cutis congenita with gastrointestinal atresia. EB-PA is an autosomal recessive, frequently lethal, epidermolysis bullosa with variable involvement of skin, nails, mucosa, and with variable effects on the digestive system. It is characterized by mucocutaneous fragility, aplasia cutis congenita, and gastrointestinal atresia, which most commonly affects the pylorus. Pyloric atresia is a primary manifestation rather than a scarring process secondary to epidermolysis bullosa.,disease:Defects in ITGB4 are a cause of generalized atrophic benign epidermolysis bullosa (GABEB) [MIM:226650]. GABEB is a non-lethal, adult form of junctional epidermolysis bullosa characterized by life-long blistering of the skin, associated with hair and tooth abnormalities.,domain:The fibronectin type-III-like domains bind BPAG1 and plectin and probably also recruit BP230.,function:Integrin alpha-6/beta-4 is a receptor for laminin. It plays a critical structural role in the hemidesmosome of epithelial cells.,similarity:Belongs to the integrin beta chain family.,similarity:Contains 1 Calx-beta domain.,similarity:Contains 1 VWFA domain.,similarity:Contains 4 fibronectin type-III domains.,subunit:Heterodimer of an alpha and a beta subunit. Beta-4 associates with alpha-6.,tissue specificity: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.,

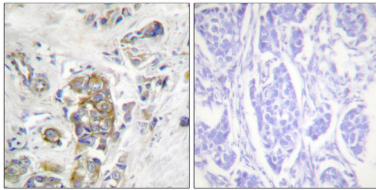
Research Area

Focal adhesion;ECM-receptor interaction;Regulates Actin and Cytoskeleton;Hypertrophic cardiomyopathy (HCM);Arrhythmogenic right ventricular cardiomyopathy (ARVC);Dilated cardiomyopathy;

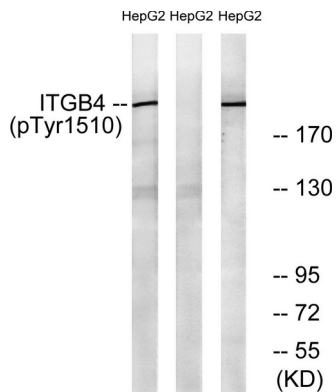
Image Data



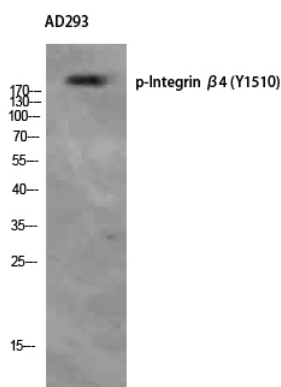
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using ITGB4 (Phospho-Tyr1510) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using ITGB4 (Phospho-Tyr1510) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with Na₂VO₃ 0.3nM 40', using ITGB4 (Phospho-Tyr1510) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of AD293 using Phospho-Integrin β4 (Y1510) Polyclonal Antibody. Antibody was diluted at 1:500