

## Integrin β4 Polyclonal Antibody

Catalog No: YT2372

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Integrin β4

**Fields:** >>PI3K-Akt signaling pathway;>>Focal adhesion;>>ECM-receptor

interaction;>>Regulation of actin cytoskeleton;>>Human papillomavirus infection;>>Hypertrophic cardiomyopathy;>>Arrhythmogenic right ventricular

cardiomyopathy;>>Dilated cardiomyopathy

Gene Name: ITGB4

Protein Name: Integrin beta-4

P16144

A2A863

Human Gene Id: 3691

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Rat Gene ld: 25724

Rat Swiss Prot No: Q64632

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Integrin beta4. AA range:1481-1530

**Specificity:** Integrin β4 Polyclonal Antibody detects endogenous levels of Integrin β4 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 202kD

**Cell Pathway:** Focal adhesion; ECM-receptor interaction; Regulates Actin and

Cytoskeleton; Hypertrophic cardiomyopathy (HCM); Arrhythmogenic right

ventricular cardiomyopathy (ARVC); Dilated cardiomyopathy;

**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],

**Function:** 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

Subcellular Location : Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipidanchor. Cell junction, hemidesmosome. Colocalizes with DST at the leading edge

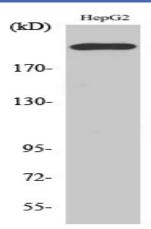
of migrating keratinocytes.

**Expression:** Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D

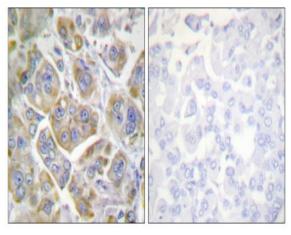
is also expressed in colon and placenta. Isoform beta-4E is also expressed in

epidermis, lung, duodenum, heart, spleen and stomach.

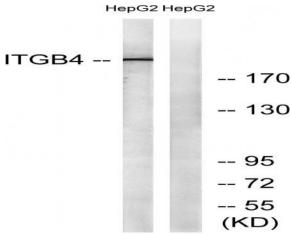
## **Products Images**



Western Blot analysis of various cells using Integrin  $\beta 4$  Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Integrin beta4 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 cells, treated with PMA 125ng/ml 30', using Integrin beta4 Antibody. The lane on the right is blocked with the synthesized peptide.