



Rabbit Anti-ITGB4/CD104 antibody

SL10028R

Product Name:	ITGB4/CD104
Chinese Name:	整合素β4抗体
Alias:	Integrin beta 4; Integrin beta4; ITGB4; ITGB-4; CD 104; CD104; CD104 antigen; GP150; Integrin beta-4; ITB4 HUMAN; ITG B4; ITGB 4; ITGB4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Rabbit,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	197kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ITGB4:131-200/1822<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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:

Integrin alpha-6/beta-4 is a receptor for laminin. It plays a critical structural role in the hemidesmosome of epithelial cells. Is required for the regulation of keratinocyte polarity and motility.

Subunit:

Heterodimer of an alpha and a beta subunit. Beta-4 associates with alpha-6. Interacts (via cytoplasmic region) with COL17A1 (via cytoplasmic region). Interacts (via cytoplasmic region) with DST isoform 3 (via N-terminus). Interacts (via cytoplasmic domain) with DST (via N-terminus). Interacts with RAC1.

Subcellular Location:

Membrane; Single-pass type I membrane protein. Cell junction, hemidesmosome. Note=Colocalizes with DST at the leading edge of migrating keratinocytes.

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.

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.

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.

Similarity:

Belongs to the integrin beta chain family.
Contains 1 Calx-beta domain.
Contains 4 fibronectin type-III domains.
Contains 1 PSI domain.
Contains 1 VWFA domain.

SWISS:
P16144

Gene ID:
3691

Database links:

[Entrez Gene: 3691](#) Human

[Entrez Gene: 192897](#) Mouse

[Entrez Gene: 25724](#) Rat

[Omim: 147557](#) Human

[SwissProt: P16144](#) Human

[SwissProt: A2A863](#) Mouse

[SwissProt: Q64632](#) Rat

[Unigene: 632226](#) Human

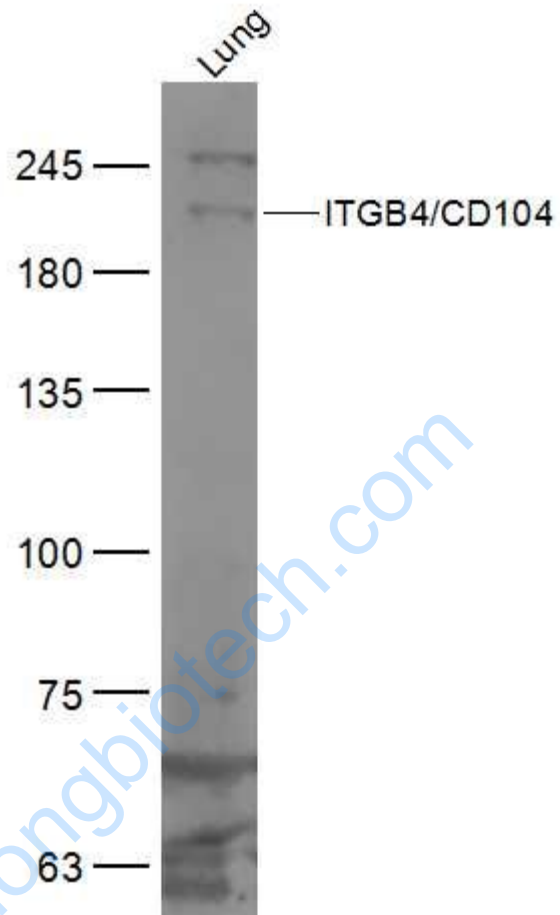
[Unigene: 213873](#) Mouse

[Unigene: 198908](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

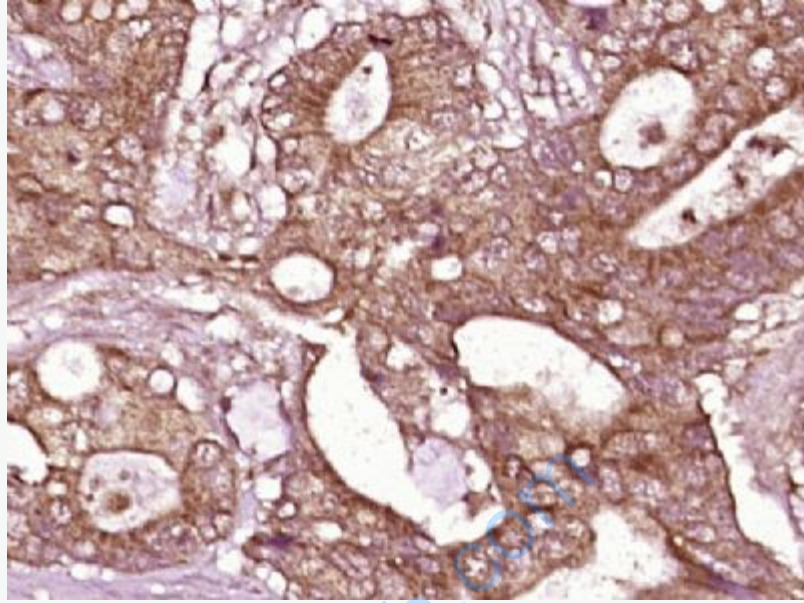
Lung (Mouse) Lysate at 40 ug

Primary: Anti-CD104 (SL10028R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 197 kD

Observed band size: 205 kD



Paraformaldehyde-fixed, paraffin embedded (human cervical carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD104) Polyclonal Antibody, Unconjugated (SL10028R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.