

# Product datasheet for AM33010PU-N

#### OriGene Technologies, Inc.

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# Integrin beta 4 (ITGB4) Mouse Monoclonal Antibody [Clone ID: 58XB4]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 58XB4

**Applications:** ELISA, FC, IF, IHC, IP, WB

Recommended Dilution: ELISA.

Western blotting. Immunofluorescence. Flow Cytometry. Immunoprecipitation.

Imunocytochemistry of paraformaldehyde fixed cells.

Immunohistochemistry on Frozen Sections.

See Reference 1 for **Protocols.** 

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** Immunization of Balb/c mice with Integrin β4. The immunogen used to raise this antibody

was the full length CD104 protein.

**Specificity:** Binds specifically to integrin  $\beta$ 4 chain(CD104) or  $\beta$ 4 integrin, that associates with integrin  $\alpha$ 6

(CD49f) forms  $\alpha$ 6/ $\beta$ 4 (CD49f/CD104) heterodimer. CD104 is expressed on epithelial cells (especially on the proliferative basal layer epithelial cells in skin), endothelial cells, Schwann

cells, certain tumor cells and a subset of pre-T cells.

Formulation: PBS

State: Purified

State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide

**Concentration:** lot specific

**Conjugation:** Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freeze-thaw cycles.





**Stability:** Shelf life: One year from despatch.

Gene Name: integrin subunit beta 4

Database Link: Entrez Gene 3691 Human

P16144

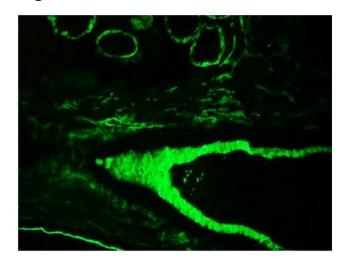
**Background:** Integrins are heterodimers composed of alpha and beta subunits, that are noncovalently

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. Integrin b4 (CD104) associates with integrin  $\alpha$ 6 (CD49f) forming the  $\alpha$ 6/ $\beta$ 4 (CD49f/CD104) heterodimer. CD104 is expressed on epithelial cells (especially on the proliferative basal layer epithelial cells in skin), endothelial cells, Schwann cells, certain tumor cells and a subset of pre-T cells. CD49f/CD104 is an adhesion receptor for laminins (especially laminin 5) and keratin filaments and is involved in the regulation of hemidesmosome formation and of cell proliferation and activation.

CD104 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.

Synonyms: ITGB4, GP150

# **Product images:**



Immunohistochemistry on frozen section of human skin showing strong staining of basal membrane (e.g. cells of sebaceous gland and sweat gland and cells forming the hair in the hair shaft) and connective tissue; no staining of muscle cells.