

Basic Information

Product Name	Anti-Integrin Beta 4/ITGB4 Antibody (Clone#AAFE-9)
Gene Name	ITGB4
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, mouse
Tested Application	WB, IHC
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human Integrin beta 4
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	210 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200

Storage

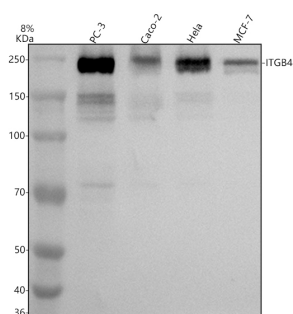
12 months from date of receipt, -20°C as supplied.

Background Information

ITGB4(Integrin, beta-4), also known as CD104 (Cluster of Differentiation 104), is a human gene. The gene encodes the integrin beta 4 subunits, a receptor for the laminins. This subunit tends to associate with alpha 6 subunits and is likely to play a pivotal role in the biology of invasive carcinoma. The ITGB4 gene is mapped on 17q25.1. Using expression profiling, Yang et al. found that ITGB4 was upregulated 6-fold by ZKSCAN3 in transfected human colon cancer cells compared with parental cells. They confirmed that ZKSCAN3 bound the promoter of ITGB4 in vitro and in vivo. ITGB4 knockdown by short hairpin RNA countered ZKSCAN3-augmented anchorage-independent colony formation in the colon cancer cell lines. The integrin beta-4 subunit is characterized by an unusually long cytoplasmic domain that harbors 4 fibronectin type III (FNIII) repeats, residing in 2 pairs separated by a connecting segment. Vidal et al. found compound heterozygosity for mutations in the ITGB4 gene in an infant with junctional epidermolysis bullosa associated with pyloric

atresia.

Selected Validation Data



Western blot analysis of anti-Integrin Beta 4/ITGB4 antibody (BM5045). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

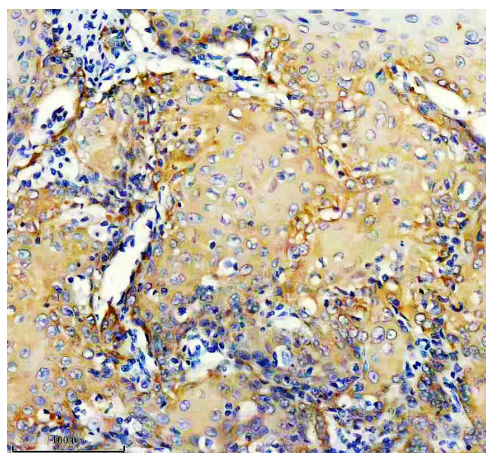
Lane 1: human PC-3 whole cell lysates,

Lane 2: human Caco-2 whole cell lysates,

Lane 3: human Hela whole cell lysates,

Lane 4: human MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Integrin Beta 4/ITGB4 antigen affinity purified monoclonal antibody (BM5045) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Integrin Beta 4/ITGB4 at approximately 210 kDa. The expected band size for Integrin Beta 4/ITGB4 is at 202 kDa.



IHC analysis of Integrin Beta 4/ITGB4 using anti-Integrin Beta 4/ITGB4 antibody (BM5045).

Integrin Beta 4/ITGB4 was detected in a paraffin-embedded section of human skin cancer tissue. The tissue section was incubated with rabbit anti-Integrin Beta 4/ITGB4 Antibody (BM5045) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.