

## Basic Information

<b>Product Name</b>	Anti-Integrin Alpha 4/ITGA4 Antibody	
<b>Gene Name</b>	ITGA4	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human Integrin alpha 4 different from the related mouse sequence by one amino acid.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	115,150-220 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

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

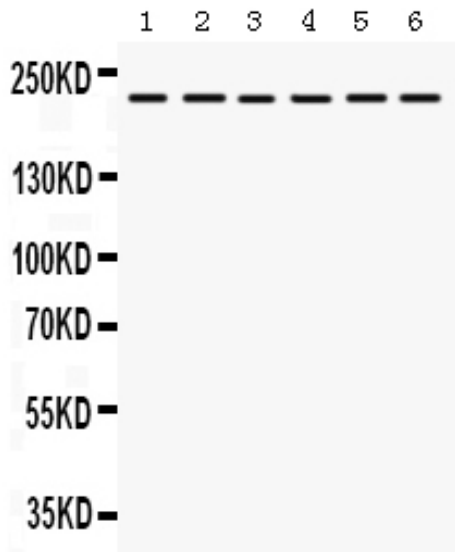
## Background Information

ITGA4/Integrin alpha4 is an integrin alpha subunit. It makes up half of the  $\alpha 4\beta 1$  lymphocyte homing receptor. The product of this gene belongs to the integrin alpha chain family of proteins. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This gene encodes an alpha 4 chain. Unlike other integrin alpha chains, alpha 4 neither contains an I-domain, nor undergoes disulfide-linked cleavage. Alpha 4 chain associates with either beta 1 chain or beta 7 chain. ITGA4 is also mapped to 2q31-q32 by fluorescence in situ hybridization.

## Reference

Anti-Integrin Alpha 4/ITGA4 Antibody被引用在3文献中。

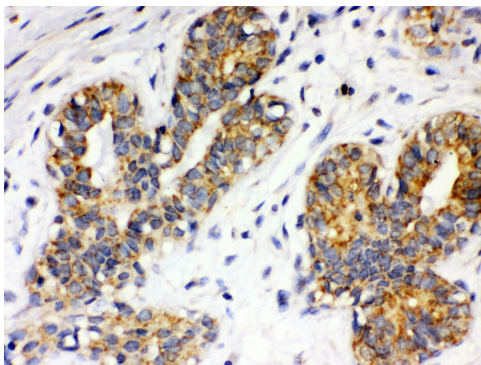
## Selected Validation Data



Western blot analysis of Integrin Alpha 4/ITGA4 using anti-Integrin Alpha 4/ITGA4 antibody (PB0687). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

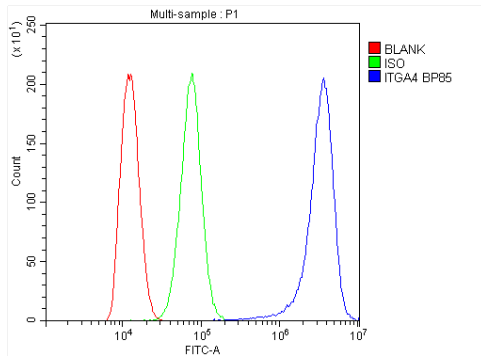
Lane 1: Rat liver tissue lysates,  
Lane 2: Rat kidney tissue lysates,  
Lane 3: JURKAT whole cell lysates,  
Lane 4: 22RV1 whole cell lysates,  
Lane 5: HEPG2 whole cell lysates,  
Lane 6: SMMC whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Integrin Alpha 4/ITGA4 antigen affinity purified polyclonal antibody (PB0687) 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 Alpha 4/ITGA4 at approximately 115,150-220 kDa. The expected band size for Integrin Alpha 4/ITGA4 is at 115 kDa.



IHC analysis of Integrin Alpha 4/ITGA4 using anti-Integrin Alpha 4/ITGA4 antibody (PB0687).

Integrin Alpha 4/ITGA4 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Integrin Alpha 4/ITGA4 Antibody (PB0687) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of THP-1 cells using anti-Integrin Alpha 4/ITGA4 antibody (PB0687).

Overlay histogram showing THP-1 cells stained with PB0687 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Integrin Alpha 4/ITGA4 Antibody (PB0687) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.