

# Integrin $\beta 4$ Phospho-Regulation Antibody Sampler Kit

Catalog # IK6270

## Kit Summary:

The Integrin  $\beta 4$  phospho-regulation antibody sampler kit can be used to detect phosphorylation of Integrin  $\beta 4$  at Tyr-1494 and Tyr-1526. The kit also includes an antibody to examine total Integrin  $\beta 4$  expression levels and secondary reagents for rabbit polyclonal and mouse monoclonal antibody detection.

## Background:

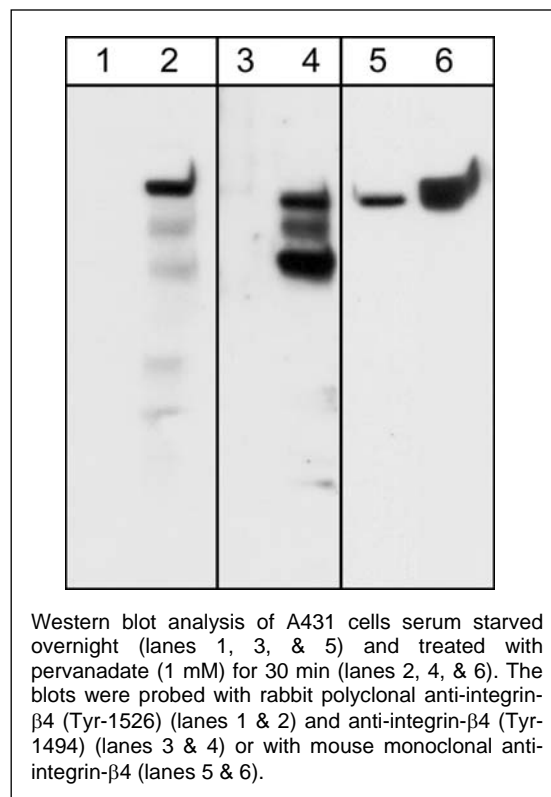
Integrins are cell adhesion molecules that can mediate bidirectional transfer of signals across the plasma membrane. The cytoplasmic domains of integrin family members interact with components of the signal transduction apparatus within cells. Integrin  $\alpha 6\beta 4$  receptors are found in basement membrane along with laminin-5. These receptors are expressed in epithelial, schwann, endothelial and some immune cells. The cytoplasmic domain of the integrin- $\beta 4$  subunit recruits the adaptor protein Shc and is required for assembly of hemidesmosomes. Tyrosine phosphorylation of multiple sites within the cytoplasmic domain regulates these cellular events. In particular, tyrosine 1526 interacts with the phosphotyrosine binding domain of Shc and is required for Shc activation. In addition, tyrosine 1494 is required for integrin-mediated IRS-2 phosphorylation and activation of PI3-kinase. More importantly, this site is critical for integrin  $\alpha 6\beta 4$  increases in carcinoma invasion.

## References:

Shaw, L.M. (2001). Mol Cell Biol. 21(15):5082-5093.  
Dans, M. et al. (2001). J Biol Chem. 276(2):1494-1502.

## Product References (IP1281):

Kim, H.I. et al. (2008) Cancer Prev Res. 1(5):385. (WB: Human  $\beta 4$  transfectants)



## Kit Components:

Catalog#	Description	Type	Size	Applications	Species Reactivity	MW (kDa)
IP1281	Integrin $\beta 4$ (Tyr-1494), phospho-specific	Rabbit pAb	50 $\mu$ l	WB, E	H, R, M	200
IP1291	Integrin $\beta 4$ (Tyr-1526), phospho-specific	Rabbit pAb	50 $\mu$ l	WB, E	H, R, M	200
IM1261	Integrin $\beta 4$ (Cytoplasmic region)	Mouse mAb	50 $\mu$ l	WB, E, ICC, IHC	H	200
MS3001	Anti-Mouse Ig:HRP	Donkey pAb	100 $\mu$ l	WB, E		
RS3251	Anti-Rabbit Ig Light-Chain Specific:HRP	Mouse mAb	100 $\mu$ l	WB, E		

Applications: WB = Western blot, E = ELISA, ICC = Immunocytochemistry, IHC = Immunohistochemistry

Species: H = Human, R = Rat, M = Mouse.

## Buffers and Storage:

Rabbit polyclonal and mouse monoclonal affinity-purified antibodies are supplied in phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at  $-20^{\circ}\text{C}$ . Stable for 1 year.

Secondary reagents are supplied in phosphate-buffered saline, 50% glycerol, and 1 mg/ml BSA. Store at  $-20^{\circ}\text{C}$ . Stable for 1 year.

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