

Anti-Integrin β 4 (Cytoplasmic region) Antibody

Catalog # AN1824

Product Information

Application	WB, ICC
Primary Accession	P16144
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M126
Calculated MW	202167

Additional Information

Gene ID	3691
Other Names	integrin, CD104, GP150

Target/Specificity	The NF- κ B/Rel transcription factors are present in the cytosol in an inactive state complexed with the inhibitory I κ B proteins. Activation of I κ B α occurs through both serine and tyrosine phosphorylation events. Activation through phosphorylation at Ser-32 and Ser-36 is followed by proteasome-mediated degradation, resulting in the release and nuclear translocation of active NF- κ B. This pathway of I κ B α regulation occurs in response to various NF- κ B-activating agents, such as TNF α , interleukins, LPS, and irradiation. An alternative pathway for I κ B α regulation occurs through tyrosine phosphorylation of Tyr-42 and Tyr-305. Tyr-42 is phosphorylated in response to oxidative stress and growth factors. This phosphorylation can lead to degradation of I κ B α and NF- κ B-activation. In contrast, Tyr-305 phosphorylation by c-Abl has been implicated in I κ B α nuclear translocation and inhibition of NF- κ B-activation. Thus, tyrosine phosphorylation of I κ B α may be an important regulatory mechanism in NF- κ B signaling.
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Dilution	WB~~1:1000 ICC~~N/A
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Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
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Precautions	Anti-Integrin β 4 (Cytoplasmic region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
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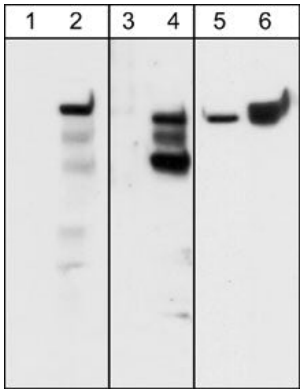
Shipping	Blue Ice
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Background

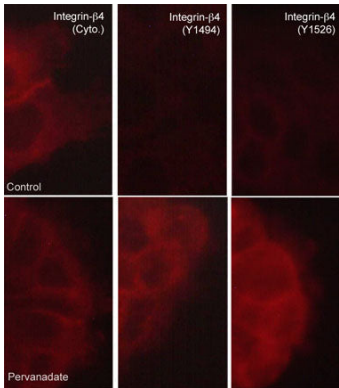
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resulting in the release and nuclear translocation of active NF- κ B. This pathway of I κ B α regulation occurs in response to various NF- κ B-activating agents, such as TNF α , interleukins, LPS, and irradiation. An alternative pathway for I κ B α regulation occurs through tyrosine phosphorylation of Tyr-42 and Tyr-305. Tyr-42 is phosphorylated in response to oxidative stress and growth factors. This phosphorylation can lead to degradation of I κ B α and NF- κ B-activation. In contrast, Tyr-305 phosphorylation by c-Abl has been implicated in I κ B α nuclear translocation and inhibition of NF- κ B-activation. Thus, tyrosine phosphorylation of I κ B α may be an important regulatory mechanism in NF- κ B signaling.

Images



Western blot analysis of A431 cells serum starved overnight (lanes 1, 3, & 5) and treated with pervanadate (1 mM) for 30 min (lanes 2, 4, & 6). The blots were probed with rabbit polyclonal anti-Integrin β 4 (Tyr-1526) (lanes 1 & 2) and anti-Integrin β 4 (Tyr-1494) (lanes 3 & 4) or with mouse monoclonal anti-Integrin β 4 (lanes 5 & 6).



Immunocytochemical labeling of integrin β 4 in control (Top) and pervanadate-treated A431 cells (Bottom). The cells were labeled with mouse monoclonal anti-integrin β 4 (Cytoplasmic region) (left) or rabbit polyclonals anti-integrin β 4 (Tyr-1494) (middle) or anti-integrin β 4 (Tyr-1526) (right), then the antibodies were detected using appropriate secondary antibodies conjugated to DyLight® 594.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.