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Anti-p130 Cas (Tyr-751), Phosphospecific Antibody

Catalog # AN1881

Product Information

Application	WB
Primary Accession	Q63767
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	104262

Additional Information

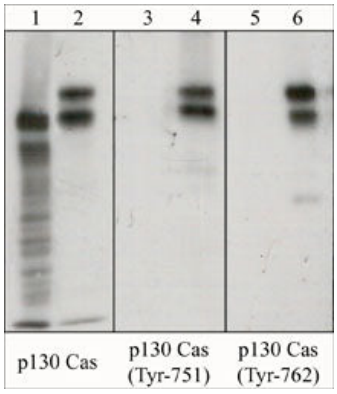
Gene ID	25414
Other Names	BCAR1, Cas
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-p130 Cas (Tyr-751), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

p130 Cas (Crk-associated substrate (CAS), breast cancer antiestrogen resistance 1 (BCAR1)) is a docking protein containing multiple protein-protein interaction domains. The N-terminal SH3 domain functions as a molecular switch regulating CAS tyrosine phosphorylation, as it interacts with tyrosine kinases and phosphatases. The C-terminal Src binding domain contains a proline-rich motif that mediates interaction with the SH3 domains of Src-family kinases (SFKs). Phosphorylation of this domain at Tyr-762 in rat (Tyr-668 in mouse) promotes this interaction. The p130 Cas central substrate domain is characterized by 15 tyrosines present in Tyr-X-X-Pro (YXXP) motifs, including Tyr-165, Tyr-249, and Tyr-410. When phosphorylated, most YXXP motifs are able to serve as docking sites for proteins with SH2 or PTB domains. In addition, phosphorylation of Tyr-751 (Tyr-653 in human) near the C-terminal caspase recognition site can attenuate caspase cleavage, while dephosphorylation occurs during apoptosis and may facilitate p130 Cas degradation.

Images

Western blot analysis of human endothelial cells serum starved overnight (lanes 1, 3, & 5) or treated with pervanadate (1 mM) for 30 minutes (lanes 2, 4, & 6). The blot was probed with anti-p130 Cas (PM1441; lanes 1 &



2), anti-p130 Cas (Tyr-751) (AN1881; lanes 3 & 4) or anti-p130 Cas (Tyr-762) (PP1451; lanes 5 & 6).