

p130 Cas Phospho-Regulation Antibody Sampler Kit

Catalog # PK6250

Kit Summary:

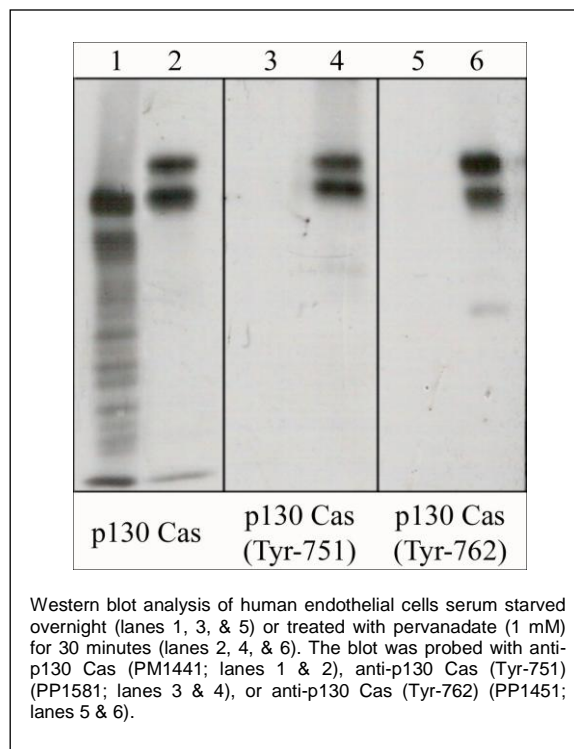
The p130 Cas phospho-regulation antibody sampler kit can be used to detect p130 Cas phosphorylation at Tyr-751 and Tyr-762. The kit also includes an antibody to examine total p130 Cas expression levels and secondary reagents for rabbit polyclonal and mouse monoclonal antibody detection.

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.

References:

Nakamoto, T. et al. (1996) J Biol Chem. 271 (15):8959.
Pellicena, P. & Miller, W.T. (2001) J Biol Chem. 276 (30):28190.
Kim, D.H. et al. (2003) Biochem Biophys Res Comm. 300:141.
Shin, N.-Y. et al. (2004) J Biol Chem. 279 (37):38331.



Kit Components:

Catalog#	Description	Type	Size	Applications	Species Reactivity	MW (kDa)
PP1581	p130 Cas (Tyr-751), phospho-specific	Rabbit pAb	50 µl	WB, E	H, R, M	130
PP1451	p130 Cas (Tyr-762), phospho-specific	Rabbit pAb	50 µl	WB, E	H, R, M	130
PM1441	p130 Cas (C-terminal region)	Mouse mAb	50 µl	WB, E, IP, IHC	H, R, M	130
MS3001	Anti-Mouse Ig:HRP	Donkey pAb	100 µl	WB, E		
RS3251	Anti-Rabbit Ig Light-Chain Specific:HRP	Mouse mAb	100 µl	WB, E		

Applications: WB = Western blot, E = ELISA, IP = Immunoprecipitation, 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°C. Stable for 1 year.

Secondary reagents are supplied in phosphate-buffered saline, 50% glycerol, and 1 mg/ml BSA. Store at -20°C. Stable for 1 year.

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