

# Anti-p130 Cas (C-terminal Region)

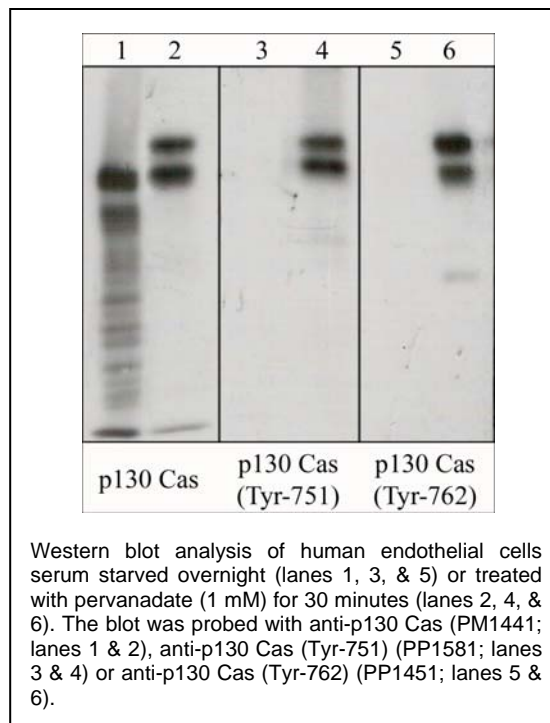
Cat. # **PM1441**  
Host **Mouse Monoclonal IgG1**  
Size **100µl**

## **Background:**

p130 Cas (Crk-associated substrate) is a docking protein containing multiple protein-protein interaction domains. The amino-terminal SH3 domain may function as a molecular switch regulating CAS tyrosine phosphorylation, as it interacts with focal adhesion kinase (FAK) and the FAK-related kinase PYK2, as well as with the tyrosine phosphatases PTP-1B and PTP-PEST. The carboxy-terminal Src binding domain (SBD) contains a proline-rich motif that mediates interaction with the SH3 domains of Src-family kinases (SFKs) and a tyrosine phosphorylation site (Tyr-762 in rat or Tyr-668 in mouse p130 Cas) that can promote interaction with the SH2 domain of SFKs. The p130 Cas central substrate domain, the major region of tyrosine phosphorylation, 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 including adaptors, Crk and Nck. In addition, phosphorylation of Tyr-751 (Tyr-653 in human) near the C-terminal caspase recognition site can attenuate caspase cleavage. Dephosphorylation of this site 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.



## **Immunogen:**

Clone M144 was generated from a recombinant protein containing amino acid residues in the C-terminal region of rat p130 Cas. This rat sequence is highly conserved in human, mouse, and chicken p130 Cas.

## **Buffer and Storage:**

Mouse monoclonal purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

## **Applications:**

Western blotting                      1:1000 dilution<sup>†</sup>                      Immunohistochemistry 1:250  
ELISA                                      1:2000 dilution                      Immunoprecipitation 5-10 µl

End user should determine optimal dilution for their particular applications and experiments.

<sup>†</sup>Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

## **Specificity:**

The antibody detects a 130 kDa\* protein corresponding to the molecular mass of p130 Cas on SDS-PAGE immunoblots of human A431, endothelial, and Hct116 cells.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

## **Related Products:**

PP1451 p130 Cas (Tyr-762), phospho-specific Rabbit Polyclonal                      PP1581 p130 Cas (Tyr-751), phospho-specific Rabbit Polyclonal

**FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

www.ecmbiosciences.com  
telephone: 859-879-2075  
toll-free: 1-800-859-8202  
tech: info@ecmbiosciences.com

**ECM**Biosciences