

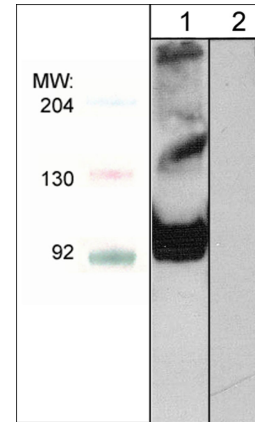
# Plexin B1 (C-terminal Region) Peptide

Cat. # PX1845

Size 50 µg

## **Background:**

Plexins are a family of large integral membrane proteins that complex with neuropilins to form semaphorin co-receptors. The extracellular region of plexins contains a semaphorin domain, multiple glycine-rich motifs, and MET-related sequences. The cytoplasmic region contains a Sex/Plexin domain and putative tyrosine phosphorylation sites that mediate signal transduction after activation. In addition, Plexin B1 and B2 contain cleavage sites for subtilisin-like proprotein convertases. These cleavage sites may be important for regulating assembly of heterodimeric receptors or release of the extracellular domain. Plexin-B1 is expressed as a 300 kDa precursor protein that can be cleaved into a 200 kDa  $\alpha$ -subunit and a 100 kDa  $\beta$ -subunit. This plexin is the receptor for the class IV semaphorin, Sema-4D. Sema-4D activation of Plexin B1 recruits and activates c-Met, which can promote cell survival, migration, and angiogenesis.



Western blot of human HepG2 cells. The blot was probed with anti-Plexin B1 in the presence (lane 2) or absence (lane 1) of Plexin B1 peptide.

## **References**

- Tamagnone, L. et al. (1999) Cell 99:71.  
Artigiani, S. et al. (2003) J Biol. Chem. 278(12):10094.  
Basile, J.R. et al. (2006) PNAS 103(24):9017.

## **Peptide Sequence:**

Plexin B1 (C-terminal) peptide includes amino acid residues in the C-terminal region of human Plexin B1. This sequence has high homology with similar regions in rat and mouse Plexin B1, and has low homology to other plexin family members.

## **Applications:**

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.  
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.  
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

## **Related Products:**

- PP1841 Plexin B1 (C-terminal Region) Rabbit Polyclonal  
PX1305 Plexin A1 (Sema Domain) Peptide  
PX1475 Plexin A1 (Sema Domain) Peptide  
SX1225 Semaphorin-3A (Central Region) Peptide  
SX1245 Semaphorin-3A (C-terminal) Peptide  
SM1881 Semaphorin-4D (C-terminal Region) Mouse Monoclonal

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

## **Buffer and Storage:**

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.

Store at -20°C. Stable for 1 year.

## **Specificity:**

The peptide is specifically recognized by Plexin B1 (C-terminal region) antibody (PP1841) in ELISA, and has been shown to block the reactivity of PP1841 in Western blot and immunocytochemistry.

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

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