

β -Catenin (N-terminal) Peptide

Cat. # CX1065

Size 50 μ g

Background:

β -Catenin is a 92 kDa protein that binds to the cytoplasmic tail of E-Cadherin. The cadherins, transmembrane adhesion molecules, are found with catenins at adherens junctions. Deletions in the cytoplasmic domain of E-Cadherin eliminate catenin binding and result in a loss of cell adhesion. Tyrosine phosphorylation of β -Catenin can regulate its interaction with critical components of adherens junctions. Both Fer and Fyn kinases phosphorylate tyrosine 142 *in vitro*. Overexpression of these kinases in epithelial cells disrupts interactions between α - and β -Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of β -Catenin. Src family kinases can also phosphorylate tyrosine 654 in the C-terminal armadillo repeat of β -Catenin. This phosphorylation regulates β -Catenin binding to E-cadherin. Thus, site-specific tyrosine phosphorylation of β -Catenin may regulate specific protein-protein interactions leading to changes in cell adhesion.

References

Brembeck, F.H. et al. (2004) Genes Dev. 18(18):2225-2230.
Ozawa, M. et al. (1990) Proc. Natl. Acad. Sci. USA 87:4246.
Piedra, J. et al. (2003) Mol. Cell. Biol. 23(7):2287-2297.

Peptide Sequence:

β -Catenin synthetic peptide corresponding to amino acid residues in the N-terminal region of human β -Catenin. This human sequence is highly conserved in rat and mouse β -Catenin.

Buffer and Storage:

Blocking Peptide is supplied in 50 μ l phosphate-buffered saline and 0.05% sodium azide. Store at -20° C. Stable for 1 year.

Applications:

Blocking 1:1,000

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.

Specificity:

The peptide is specifically recognized by anti- β -Catenin (N-terminal) antibody (CP1061) in ELISA, and is recommended for use in blocking CP1061 reactivity in Western blot and immunocytochemistry.

Related Products:

CP1201 β -Catenin / γ -Catenin (a.a. 649-661) Rabbit Polyclonal
CP1061 β -Catenin (N-terminal) Rabbit Polyclonal
CP1081 β -Catenin (Tyr-142), phospho-specific [Conserved site] Rabbit
CP1191 β -Catenin (Tyr-86), phospho-specific Rabbit Polyclonal
CK6120 β -Catenin Phospho-Regulation Antibody Sampler Kit
CK6230 δ 1-Catenin Phospho-Regulation Antibody Sampler Kit

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

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

ECMBiosciences

Rev 1/11/2008