γ-Catenin (a.a. 545-555)

Blocking Peptide

Cat. # CX2975
Size 50 µg

Background

Plakoglobin (γ-Catenin) is a catenin family member identified as a component of desmosomes. γ-Catenin has high homology to β-catenin and, like β-catenin, it can associate with the cadherins, E-cadherin and N-cadherin. One molecule of α-catenin and at least one molecule of β-catenin and γ-Catenin simultaneously bind to a single cadherin molecule. A 19-amino acid sequence of desmoglein was found to be critical for binding of γ-Catenin. Similar catenin-binding domains found in cadherins, suggest a common mechanism for γ-Catenin localization to both adherens junctions and desmosomes. Phosphorylation of tyrosine residues in γ-Catenin can modify its interactions with other proteins. Phosphorylation of tyrosine 644 decreases γ-Catenin association with α-catenin, but increases binding to desmoplakin. Fer kinase can phosphorylate tyrosine 550, which increases γ-Catenin binding to α-catenin. Thus, tyrosine phosphorylation may be important for regulation of γ-Catenin protein-protein interactions within desmosomal complexes.

Background References

McCrea, P.D. et al. (1991) Science 254:1359.
Miravet, S. et al. (2003) Mol. Cell. Biol. 23(20) :7391.

Applications

Blocking	1:1000
ELISA	50 ng/well

End user should determine optimal dilution for their particular applications and experiments.
Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Specificity

The peptide is specifically recognized by γ-Catenin (a.a. 545-555) antibody (CP2971) in ELISA, and has been shown to block the reactivity of CP2971 during Western blot. In addition, the peptide is recommended for use in blocking CP2971 reactivity in immunocytochemistry.

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

Peptide Sequence

γ-Catenin synthetic peptide corresponding to amino acid residues 545 to 555 from human γ-Catenin. This peptide sequence is highly conserved in rat and mouse γ-Catenin.

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.

Related Products

CP1191	β-Catenin (Tyr-86), phospho-specific Rabbit Polyclonal
CP2961	β-Catenin (Tyr-489)[γ-Catenin (Tyr-480)], phospho-specific Rabbit
CM1111	γ-Catenin (C-terminal) Mouse Monoclonal
CP2971	γ-Catenin (a.a. 545-555) Rabbit Polyclonal
CP1121	γ-Catenin (Tyr-550), phospho-specific Rabbit Polyclonal

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