PRODUCT INFORMATION

β-Catenin Blocking Peptide

Item No. 300013

Overview and Properties

Contents: This vial contains 200 µg of peptide.
Storage: -20°C (as supplied)
Storage Buffer: 200 µl TBS, pH 7.4, containing 0.1% BSA and 0.02% sodium azide
Stability: ≥3 years

Description

β-Catenin is a multifunctional protein known to be part of the Wnt pathway playing essential roles in development and carcinogenesis.[1-3] It can act as a regulator of the cell cycle and apoptosis in a variety of different cell systems.[4,5] The entire primary amino acid sequence is identical among human, rat, and mouse, indicating critical functions of this protein. Overexpression of β-catenin causes enlarged forebrains and cytoarchitectural distortions in mice.[6-8] The reported molecular weight for this protein ranges from 86-97 kDa.[9,10]

Procedures

This vial contains 200 µg peptide in 200 µl TBS, pH 7.4, containing 0.1% BSA and 0.02% sodium azide. The human β-catenin blocking peptide, amino acids 43-62 (APSLSGKGNPEEEDVDTSQV), can be used in conjunction with Cayman's β-Catenin Polyclonal Antibody (Item No. 100029) to block protein-antibody complex formation during immunochemical analysis of β-catenin.

To block antibody/protein complex formation, the following procedure is recommended:

1. Mix the β-Catenin Polyclonal Antibody (Item No. 100029) and blocking peptide together in a 1:1 (v/v) ratio in a microfuge tube. For example, mix 20 µl of antibody and 20 µl of peptide.*
2. Incubate for one hour at room temperature with occasional mixing prior to further dilution and application of the mixture to the immunoblot.
3. Dilute the mixture to the final working antibody concentration and apply to the slide or membrane as usual.

*This is a recommended mixture. The minimum amount of peptide needed for complete blocking has not been precisely determined and may vary depending on the sample being analyzed. The amount of peptide required may need to be increased if sufficient blocking does not occur.

References

1. Yano, H., Hara, A., Takenaka, K., *et al. Neurol. Res.* **22**, 650-656 (2000).
2. Haq, S., Michael, A., Andreucci, M., *et al. Proc. Natl. Acad. Sci. USA* **100(8)**, 4610-4615 (2003).
3. Yasui, K., Li, G., Wang, Y., *et al. Development Growth Differ.* **44**, 467-475 (2002).
4. Olmeda, D., Castel, S., Vilaró, S., *et al. Molecular Biology of the Cell* **14**, 2844-2860 (2003).
5. Jaiswell, A.S., Marlow, B.P., Gupta, N., *et al. Oncogene* **21**, 8414-8427 (2002).
6. Chung, S.S.W., Lee, W.M., and Cheng, C.Y. *J. Cell. Physiol.* **181**, 258-272 (1999).
7. Nollet, F., Berx, G., Molemans, F., *et al. Genomics* **32**, 413-424 (1996).
8. Chenn, A. and Walsh, C.A. *Cerbral Cortex* **13**, 599-606 (2003).
9. Aberle, H., Butz, S., Stappert, J., *et al. J. Cell Sci.* **107**, 3655-3663 (1994).
10. Su, L.-K., Vogelstein, B., and Kinzler, K.W. *Science* **262**, 1734-1737 (1993).

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