



DB111: β -Tubulin (N14)

Background:

The well-studied members of the Tubulin family of proteins, alpha, beta and gamma have been joined by the newest members delta, epsilon, zeta and eta (1). Microtubule function relies upon alpha-, beta-, and gamma-tubulin. Alpha and beta-Tubulin dimerize to form the microtubule filament, while gamma-tubulin combines with other proteins to form the gammasome that is essential for nucleating microtubule filaments at the centrosome (2). Once formed the microtubules function in chromosome segregation, cell shape maintenance, transport, motility and organelle distribution (3). Drugs (taxol, vinca alkaloids) that can affect the Tubulin-microtubule equilibrium have proven to be effective anticancer drugs.

Origin:

β -Tubulin (N14) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping near the amino terminus of human β -Tubulin.

Product Details:

Each vial contains 200 μ g/ml of affinity purified rabbit IgG, β -Tubulin (N14) DB111, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB111P, for use in competition studies. Each vial contains 100 μ g of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 μ g BSA.

Specificity:

β -Tubulin (N14) DB111 will recognize mouse, rat, human, rabbit, *Xenopus*, *Drosophila*, zebra fish, chicken, dog, pig, and cat β -Tubulin by western blotting and immunohistochemistry. Recommended western blotting starting dilution 1:400.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Dutcher SK. 2001. The Tubulin fraternity: alpha to eta. *Current Opinion Cell Biol.* 13(1): 49-54.
2. Leask A, Stearns T. 1998. Expression of amino- and carboxyl-terminal gamma- and alpha-tubulin mutants in cultured epithelial cells. *J. Biol. Chem.* 273(5): 2661-2668.
3. Hadfield JA, Ducki S, Hirst N, McCown AT. 2003. Tubulin and microtubules as targets for anticancer drugs. *Prog. Cell Cycle Res.* 5:309-325.