

Product Information

Anti-Casein Kinase 2 β antibody, Mouse monoclonal
clone 6D5, purified from hybridoma cell culture

Product Number **C3617**

Product Description

Anti-Casein Kinase 2 β antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the hybridoma 6D5 produced by the fusion of mouse myeloma cells (X63.Ag8 cells) and splenocytes from BALB/c mice immunized with human recombinant Casein Kinase 2 β (CK2 β).¹ The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2

Monoclonal Anti- Casein Kinase 2 β recognizes human,¹ bovine, rat, mouse¹ and hamster¹ Casein Kinase 2 β (CK2 β), ~30 kDa. The antibody epitope resides within amino-acids 123-127 of human CK2 β . The product is useful in ELISA, dot blot and immunoblotting.¹

Casein Kinase type 2 (CK2) is a tetrameric enzyme of 130-150 kDa with $\alpha\beta_2$ structure.^{2,3} The α subunit is catalytic and the β subunit is thought to have regulatory properties. CK2 is expressed in the nucleus, as well as in the cytoplasm and mitochondria. It has been implicated in a variety of cellular processes and is important for signaling pathways controlling growth division including mitosis, cellular transformation, and differentiation of cells.^{3,4} Around one thousand different protein substrates were found to be targets for CK2, among them nuclear proteins, enzymes, and transcription factors. It was shown that some mitogens induce the activity of CK2.^{5,6} Analysis of 308 sites phosphorylated by CK2 shows the paramount relevance of negatively charged side chains that are predominant over any other residues at positions n+3, n+2 and n+1.⁷ In cancer cells, CK2 expression is elevated versus normal cells. Modest deregulation of CK2 expression imparts a potent oncogenic potential to cells. Cells treated with antisense to CK2 are induced to go through apoptosis.⁸

Reagent

Supplied as a solution in 0.0 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~2 mg/ml.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2-4 μ g/ml is determined using total cell extract of HepG2 cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

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