



## Product Information

### Anti-Protein Kinase C $\beta_2$ (654-665)

(PKC  $\beta_2$ ; PKC  $\beta$ II)

Developed in Rabbit, Affinity Isolated Antibody

Product Number **P 8371**

#### Product Description

Anti-Protein Kinase C  $\beta_2$  was developed in rabbit using a synthetic peptide corresponding to amino acid residues 654-665 from human PKC  $\beta_2$  with a C-terminal peptide amidation as the immunogen. This sequence is completely conserved in PKC  $\beta_1$  and is 100% conserved in bovine, human, rat, porcine, and mouse species. The sequence is 90% and 88% conserved in *C. elegans* and fruit fly, respectively. The antibody was affinity isolated on immobilized immunogen.

Anti-Protein Kinase C  $\beta_2$  recognizes recombinant human Protein Kinase C  $\beta_2$ . By Western blot, this antibody detects an ~80 kDa protein representing recombinant human PKC  $\beta_2$ .

Protein kinase C is a family of homologous serine-threonine protein kinases, which are key regulatory enzymes in signal transduction, cellular regulation, tumor promotion and oncogenesis.<sup>1</sup> There have been at least 12 different PKC isoforms identified in humans to date, including  $\alpha$ ,  $\beta_1$ ,  $\beta_2$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\zeta$ ,  $\eta$ ,  $\theta$ ,  $\iota$ ,  $\lambda$ , and  $\mu$ . The different PKC isoforms vary in structure, subcellular localization, tissue distribution and response to extracellular signals.<sup>2</sup>

#### Reagent

The antibody is supplied as 100  $\mu$ g of affinity isolated antibody in phosphate buffered saline containing 1.0 mg/ml bovine serum albumin and 0.05 % sodium azide as preservative.

#### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

#### Storage/Stability

Store at  $-20$  °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. 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

The recommended working dilution is 2  $\mu$ g/ml for immunoblotting.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

#### References

1. Murray, N.R., et al., Protein kinase C  $\beta$ II and TGF $\beta$ RII in  $\omega$ -3 fatty acid-mediated inhibition of colon carcinogenesis., *J. Cell Biol.*, **157**, 915-920 (2002).
2. Dempsey, E.C., et al., Protein kinase C isozymes and the regulation of diverse cell responses., *Am J Physiol Lung Cell Mol Physiol.*, **279**, L429-L438 (2000).
3. Parker, P.J. and Murray-Rust, J., PKC at a glance., *J. Cell Sci.*, **117**, 131-132 (2004)

MCT/PHC 12/04

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