

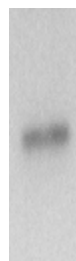
PRODUCT DATASHEET

Anti-PP2A_C Detection Kit

Protein phosphatase 2A (PP2A, GLO130-GLO132) is a divalent cation-independent protein serine/threonine phosphatase involved in regulating numerous cellular processes including the cell cycle, growth and differentiation. Physiological targets of PP2A include cell surface receptors and ion channels, protein kinases involved in mitogenic signaling and the cell cycle, key regulatory enzymes and proteins involved in metabolism, as well as numerous transcription factors. The phosphatase has been implicated as a growth suppressor. It is inhibited potently by tumor promoters such as okadaic acid and by I₁^{PP2A} (GLO140-250) and I₂^{PP2A} (GLO141-250), two naturally-occurring cancer-associated cellular proteins. Additionally, the SV40 small t antigen replaces the B subunit during viral transformation and subverts the physiological function of a subset of PP2A complexes in a substrate selective manner.

GloboZymes Anti-PP2A_C Detection Kit includes 200 μ l of Anti-PP2A_C (GLO148-200) and an aliquot of highly purified bovine kidney PP2A. The enzyme aliquot is provided in SDS sample buffer ready for use in five applications as positive control in Western blots. PP2A_C is a polyclonal antiserum that was raised in rabbits to the catalytic subunit of PP2A.

Figure: Western blot of 10 μ g HEK293 cell extract with Anti-PP2A_C. The band corresponds to the catalytic subunit of PP2A (~ 36 kDa)



References: **Amick GD et al** (1992) "Protein phosphatase 2A is a specific protamine kinase-inactivating phosphatase" *Biochem J* 287, 1019; **Guo H & Damuni Z** (1993) "Autophosphorylation-activated protein kinase phosphorylates and inactivates protein phosphatase 2A" *Proc Natl Acad Sci USA* 90, 2500; **Mayer-Jaekel RE & Hemmings BA** (1994) "Protein phosphatase 2A -- a 'ménage à trois'" *Trends Cell Biol* 4, 287; **Shenolikar S** (1994) "Protein serine/threonine phosphatases--new avenues for cell regulation" *Ann Rev Cell Biol* 10, 55; **Wera S & Hemmings BA** (1994) "Serine/threonine protein phosphatases" *Biochem J* 311, 17; **Janssens V & Goris J** (2001) "Protein phosphatase 2A: a highly regulated family of serine/threonine phosphatases implicated in cell growth and signalling" *Biochem J* 353, 417

Disclaimer: GloboZymes products are for basic science research purposes only. They are not intended for human drug, food additive, clinical or household use.