

MYPT1 Antibody Sampler Kit

Cat# AK0196

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Protein phosphatase 1 (PP1) is a ubiquitous eukaryotic protein serine/threonine phosphatase involved in the regulation of various cell functions. Substrate specificity is determined by the binding of a regulatory subunit to the PP1 catalytic subunit (PP1c). It is estimated that over fifty different regulatory subunits exist. The myosin phosphatase holoenzyme is composed of three subunits: PP1c, a targeting/regulatory subunit (MYPT/myosin-binding subunit of myosin phosphatase), and a 20 kDa subunit of unknown function (M20). MYPT binding to PP1c δ alters the conformation of the catalytic cleft and increases enzyme activity and specificity. Two MYPT isoforms that are 61% identical have been described. MYPT1 is widely expressed, while MYPT2 expression appears to be exclusive to heart and brain. Related family members include MBS85, MYPT3, and TIMAP. Myosin phosphatase regulates the interaction of actin and myosin in response to signaling through the small GTPase Rho. Rho activity inhibits myosin phosphatase via Rho-associated kinase (ROCK). Phosphorylation of MYPT1 at Thr696 and Thr853 results in phosphatase inhibition and cytoskeletal reorganization.

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340599	PPP1R12A Polyclonal Antibody	20 μ L	WB, IHC, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A340344	Phospho-PPP1R12A (Thr853) Polyclonal Antibody	20 μ L	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120 μ L	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.