Technical Data Sheet

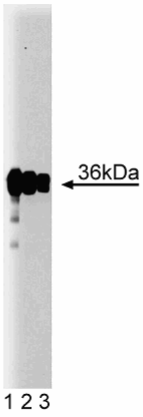
Purified Mouse Anti-PP2A Catalytic α

Product Information

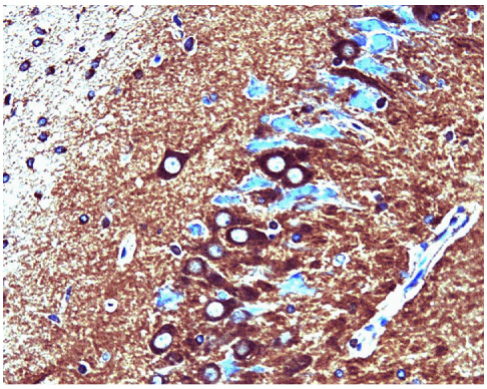
Material Number:	**610556**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	46/PP2A Catalytic α
Immunogen:	Human PP2A aa. 153-309
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse
Target MW:	36 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Protein **p**hosphatases of the type **2A** (PP2A) are composed of two regulatory and one catalytic subunit. The different subunits are encoded by multiple genes. PP2A are specific for phosphoserine and phosphothreonine residues of proteins that are involved in the regulation of cellular growth. PP2A binds and dephosphorylates the middle T antigens of polyoma virus. This interaction may regulate the transcriptional activity of the virus. The 36 kDa catalytic subunit is rapidly tyrosine phosphorylated as a result of growth factor stimulation or cell transformation. Tyrosine phosphorylation of the catalytic subunit may inactivate the phosphatase activity of PP2A.



Western blot analysis of PP2A Catalytic α on A431 cellI lysate. *Lane 1: 1:5000, lane 2: 1:10000, lane 3: 1:20000 dilution of anti-PP2A Catalytic α.*



Catalytic alpha (clone 46) staining on rat brain. *Formalin fixed paraffin section without citrate buffer pretreatment. 40X*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development

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Recommended Assay Procedure:
Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Chen J, Parsons S, Brautigan DL. Tyrosine phosphorylation of protein phosphatase 2A in response to growth stimulation and v-src transformation of fibroblasts. *J Biol Chem.* 1994; 269(11):7957-7962.(Biology)

Efendiev R, Yudowski GA, Zwiller J, et al. Relevance of dopamine signals anchoring dynamin-2 to the plasma membrane during Na+,K+-ATPase endocytosis. *J Biol Chem.* 2002; 277(46):44108-44114.(Clone-specific: Immunofluorescence, Western blot)

Nunbhakdi-Craig V, Machleidt T, Ogris E, Bellotto D, White CL 3rd, Sontag E. Protein phosphatase 2A associates with and regulates atypical PKC and the epithelial tight junction complex. *J Cell Biol.* 2002; 158(5):967-978.(Clone-specific: Western blot)

Reiken S, Gaburjakova M, Guatimosim S. Protein kinase A phosphorylation of the cardiac calcium release channel (ryanodine receptor) in normal and failing hearts. Role of phosphatases and response to isoproterenol. *J Biol Chem.* 2003; 278(1):444-453.(Clone-specific: Western blot)

Yang J, Fan GH, Wadzinski BE, Sakurai H, Richmond A. Protein phosphatase 2A interacts with and directly dephosphorylates RelA. *J Biol Chem.* 2002; 276(51):47828-47833.(Clone-specific: Immunoprecipitation, Western blot)