Technical Data Sheet

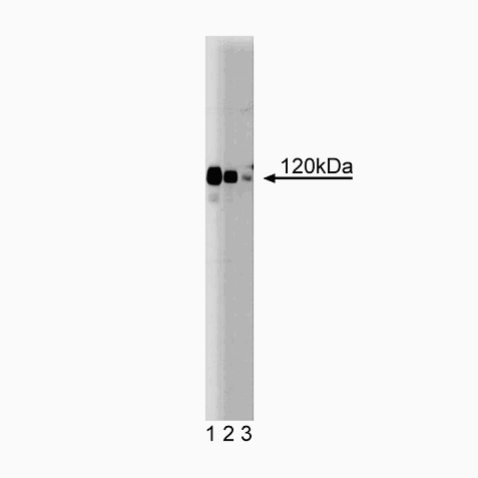
Purified Mouse Anti-PRK1

Product Information

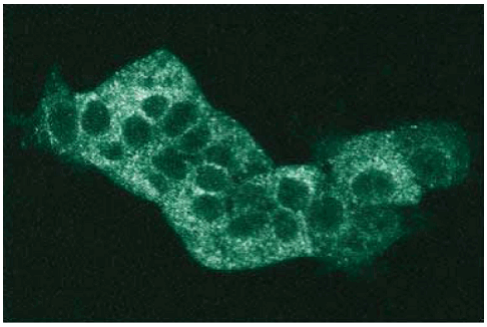
Material Number:	**610686**
Alternate Name:	PKN
Size:	50 µg
Concentration:	250 µg/ml
Clone:	49/PRK1
Immunogen:	Human PRK1 aa. 215-388
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse
Target MW:	120 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Members of the Protein Kinase C (PKC) family of homologous serine/threonine protein kinases are involved in a number of processes such as cell growth, cell differentiation, and cytokine secretion. PKCs are activated by Ca2+, phospholipids, diacylglycerol, phorbol esters, and proteolysis. PRK1 (**P**KC-**R**elated **K**inase 1, also named PKN) was originally identified in human hippocampus as a novel protein kinase with sequence homology to PKC. PRK1 contains 942 amino acids with an apparent molecular weight of 120 kDa. Although activated by limited proteolysis, PRK1 is not activated by Ca2+/diacylglycerol or phorbol esters. However, PRK1 is activated by phospholipids and arachidonic acid. PRK1 may regulate cytoskeletal changes since it binds to Rho-GTP and becomes phosphorylated *in vivo*, coincidentally with the formation of focal adhesions and stress fibers.



Western blot analysis of PRK1 on Jurkat lysate. *Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of PRK1.*



MCF7

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	Not Recommended

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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

Flynn P, Mellor H, Casamassima A, Parker PJ. Rho GTPase control of protein kinase C-related protein kinase activation by 3-phosphoinositide-dependent protein kinase. *J Biol Chem.* 2000; 275(15):11064-11070.(Clone-specific: Western blot)

Hughes WE, Larijani B, Parker PJ. Detecting protein-phospholipid interactions. Epidermal growth factor-induced activation of phospholipase D1b in situ. *J Biol Chem.* 2002; 277(25):22974-22979.(Biology: Western blot)

Mukai H, Kitagawa M, Shibata H. Activation of PKN, a novel 120-kDa protein kinase with leucine zipper-like sequences, by unsaturated fatty acids and by limited proteolysis. *Biochem Biophys Res Commun.* 1994; 204(1):348-356.(Biology)

Mukai H, Kitagawa M, Shibata H. Activation of PKN, a novel 120-kDa protein kinase with leucine zipper-like sequences, by unsaturated fatty acids and by limited proteolysis. *Biochem Biophys Res Commun.* 1994; 204(1):348-356.(Biology)

Palmer RH, Ridden J, Parker PJ. Cloning and expression patterns of two members of a novel protein-kinase-C-related kinase family. *Eur J Biochem.* 1995; 227(1-2):344-351.(Biology)