Technical Data Sheet

Purified Mouse Anti-PI3-Kinase p170

Product Information

Material Number:	611046
Size:	50 µg
Concentration:	250 µg/ml
Clone:	17/PI3-Kinase p170
Immunogen:	Mouse PI3-Kinase p170
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat
v	Tested in Development: Human, Mouse
Target MW:	170 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium
-	azide.

Description

PI3-kinase phosphorylates the D-3 position of the inositol ring of phosphatidylinositol (PtdIns), producing PtdIns(3)P, PtdIns(3,4)P2, and PtdIns(3,4,5)P3. PI3-Kinase is a heterodimer of an 85 kDa regulatory subunit (p85) and a 110 kDa catalytic subunit (p110). However, this heterodimer is only one member of a larger family of proteins with similarity to the p110 subunit. These different PI3-kinase isoforms have been divided into three classes. Class I consists of p110 α and p110 β which bind the p85 subunit and associate with receptor tyrosine kinases. Class II contains 68D, cpk, and p170. These proteins all contain a C-terminal C2 domain and phosphorylate PtdIns and PtdIns(4)P, but not PtdIns(4,5)P2. Class III members only phosphorylate PtdIns to PtdIns(3)P and include the *S. cerevisiae* Vps34p and its human homologs. The first human Class II PI3-kinase to be described, p170, contains the characteristic C-terminal phosphoinositide-binding C2 domain also found in PKC isoforms and synaptotagmins. In addition, expression of PI3-kinase p170 is widespread and may indicate that the protein performs a housekeeping function in cell growth and differentiation.





123

Western blot analysis of PI3-Kinase p170 on rat brain lysate. Lane 1: 250, lane 2: 1:500, lane 3: 1:1000 dilution of PI3-Kinase p170.

WI38

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
Immunofluorescence	Tested During Development

BD Biosciences

bdbiosciences.	com							
United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean			
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995			
For country-specific contact information, visit bdbiosciences.com/how_to_order/								
Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone yroduct or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. BD. BD Loog and all other trademarks are the property of Becton. Dickinson and Company. ©2008 BD								

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results. 1.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols. 2.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before 3. 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

Brown RA, Ho LK, Weber-Hall SJ, Shipley JM, Fry MJ. Identification and cDNA cloning of a novel mammalian C2 domain-containing phosphoinositide 3-kinase, HsC2-PI3K. *Biochem Biophys Res Commun.* 1997; 233(2):537-544.(Biology) Virbasius JV, Guilherme A, Czech MP. Mouse p170 is a novel phosphatidylinositol 3-kinase containing a C2 domain. *J Biol Chem.* 1996; 271(23):13304-13307.

(Biology)