

Datasheet: MCA1168

Description:	MOUSE ANTI PI-3 KINASE p85 SUBUNIT ALPHA
Specificity:	PI-3 KINASE p85 SUBUNIT ALPHA
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	U13
Isotype:	IgG1
Quantity:	2 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			Neat
Western Blotting	▪			1/200

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Bovine

Species Cross Reactivity

Reacts with: Human, Monkey, Rat, Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Tissue Culture Supernatant - liquid

Preparation

Tissue culture supernatant containing 0.2M Tris/HCl pH7.4 and 5-10% foetal calf serum

Preservative Stabilisers

0.09% sodium azide (NaN₃)

Immunogen	Balculovirus expressed (Recombinant) Bovine p85 alpha subunit of PI3 kinase.
External Database Links	<p>UniProt:</p> <p>P27986 Related reagents</p> <p>P23727 Related reagents</p> <p>P26450 Related reagents</p> <p>Q63787 Related reagents</p> <p>Entrez Gene:</p> <p>5295 PIK3R1 Related reagents</p> <p>282307 PIK3R1 Related reagents</p> <p>18708 Pik3r1 Related reagents</p> <p>25513 Pik3r1 Related reagents</p>
Synonyms	GRB1
RRID	AB_322369
Fusion Partners	Spleen cells from immunized mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	<p>Mouse anti PI-3 Kinase p85 Subunit alpha antibody, clone U13 recognizes the SH3 domain of the p85 alpha subunit of bovine PI3 kinase, also known as Phosphatidylinositol 3-kinase regulatory subunit alpha, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha or PtdIns-3-kinase regulatory subunit p85-alpha. p85 α PI3 kinase is a 724 amino acid ~85 kDa protein bearing a single Rho-GAP domain, two SH2 domains and a single N-terminal SH3 domain. Multiple isoforms of the protein can be generated by alternative splicing, mouse anti PI-3 Kinase p85 subunit alpha antibody, clone U13 recognizes only those isoforms containing the SH3 domain (isoforms 1 and 4) but not those lacking the domain (isoforms 2,3 and 5).</p> <p>Deficiencies in the expression of the PIK3R1 gene can lead to immunodeficiency Agammaglobulinemia 7, autosomal recessive, due to the inhibition of B cell development (Conley et al. 2012) and the developmental condition SHORT syndrome (Chudasama et al. 2013).</p>
References	<ol style="list-style-type: none"> Woodfield, R.J. <i>et al.</i> (2001) The p85 subunit of phosphoinositide 3-kinase is associated with beta-catenin in the cadherin-based adhesion complex. Biochem J. 360 (Pt 2): 335-44. Reif, K. <i>et al.</i> (1993) Divergent regulation of phosphatidylinositol 3-kinase P85 alpha and P85 beta isoforms upon T cell activation. J Biol Chem. 268 (15): 10780-8. Dawson, C.W. <i>et al.</i> (2003) Epstein-Barr virus latent membrane protein 1 (LMP1) activates the phosphatidylinositol 3-kinase/Akt pathway to promote cell survival and induce actin filament remodeling. J Biol Chem. 278: 3694-704. Cross, M.J. <i>et al.</i> (1995) Wortmannin and its structural analogue demethoxyviridin inhibit stimulated phospholipase A2 activity in Swiss 3T3 cells. Wortmannin is not a specific inhibitor of phosphatidylinositol 3-kinase. J Biol Chem. 270: 25352-5.

5. Gillham, H. *et al.* (1999) Intracellular movement of green fluorescent protein-tagged phosphatidylinositol 3-kinase in response to growth factor receptor signaling. [J Cell Biol. 146: 869-80.](#)
6. Shepherd, P.R. *et al.* (1997) Differential regulation of phosphoinositide 3-kinase adapter subunit variants by insulin in human skeletal muscle. [J Biol Chem. 272: 19000-7.](#)
7. Raymond, A.A. *et al.* (2017) Reptin regulates insulin-stimulated Akt phosphorylation in hepatocellular carcinoma via the regulation of SHP-1/PTPN6. [Cell Biochem Funct. 35 \(6\): 289-95.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10055 available at: 10055: <https://www.bio-rad-antibodies.com/uploads/MSDS/10055.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#), [DyLight@650](#), [DyLight@680](#), [DyLight@800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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