

Datasheet for ABIN744743

## anti-PI3K p85 alpha/gamma antibody (pTyr199, pTyr467)



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### Overview

Quantity:	100 µL
Target:	PI3K p85 alpha/gamma (PI3K p85a/g)
Binding Specificity:	pTyr199, pTyr467
Reactivity:	Human, Mouse, Rat, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PI3K p85 alpha/gamma antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

### Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human PI3K around the phosphorylation site of p85 alphaTyr467
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rabbit, Rat
Predicted Reactivity:	Dog,Cow,Pig,Horse
Purification:	Purified by Protein A.

### Target Details

Target:	PI3K p85 alpha/gamma (PI3K p85a/g)
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## Target Details

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Alternative Name:	PI3 kinase p85 alpha + gamma + ( <a href="#">PI3K p85a/g Products</a> )
Background:	<p>Synonyms: p85, AGM7, GRB1, IMD36, p85-ALPHA, Phosphatidylinositol 3-kinase regulatory subunit alpha, PI3-kinase regulatory subunit alpha, PI3K regulatory subunit alpha, PtdIns-3-kinase regulatory subunit alpha, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha, PI3-kinase subunit p85-alpha, PtdIns-3-kinase regulatory subunit p85-alpha, PIK3R1</p> <p>Background: Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p11 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling.</p>
Gene ID:	5295
UniProt:	<a href="#">P27986</a>

## Application Details

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Application Notes:	WB 1:300-5000 ELISA 1:500-1000 FCM 1:20-100 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

## Handling

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Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

## Handling

Storage: 4 °C,-20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

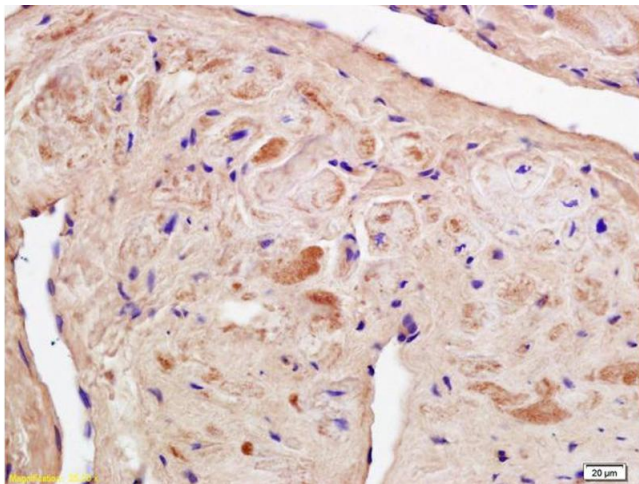
## Publications

Product cited in: Jeong, Liu, Kim: "Dried plum and chokeberry ameliorate d-galactose-induced aging in mice by regulation of PI3k/Akt-mediated Nrf2 and Nf-kB pathways." in: **Experimental gerontology**, Vol. 95, pp. 16-25, (2017) ([PubMed](#)).

Padiya, Chowdhury, Borkar, Srinivas, Pal Bhadra, Banerjee: "Garlic attenuates cardiac oxidative stress via activation of PI3K/AKT/Nrf2-Keap1 pathway in fructose-fed diabetic rat." in: **PLoS ONE**, Vol. 9, Issue 5, pp. e94228, (2014) ([PubMed](#)).

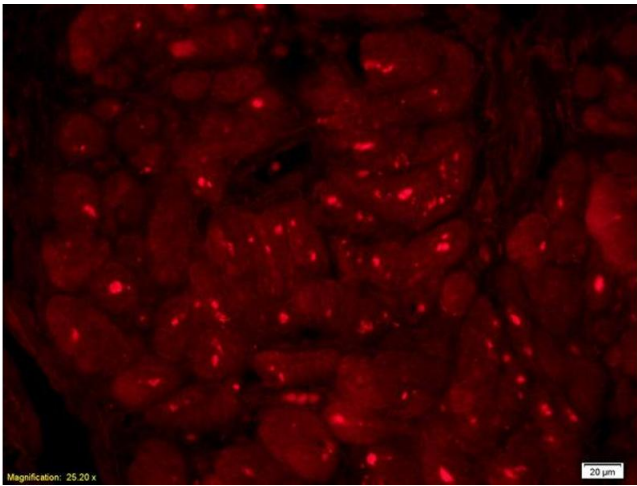
Sun, Yang, Luo, Wang, Chen, Zhang, Wang, Li: "Thyroid hormone inhibits the proliferation of piglet Sertoli cell via PI3K signaling pathway." in: **Theriogenology**, (2014) ([PubMed](#)).

## Validation report #029801 for Western Blotting (WB)



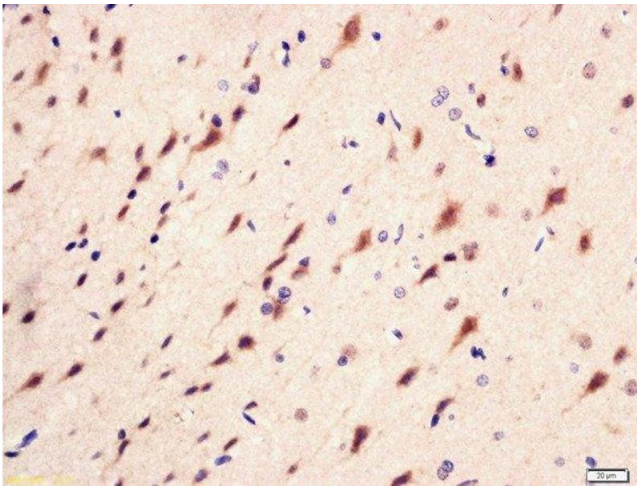
### Immunohistochemistry

**Image 1.** Formalin-fixed and paraffin embedded rat heart labeled with Anti-phospho-PI3K p85(Tyr467) /p55(Tyr199) Polyclonal Antibody, Unconjugated (ABIN744743) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



### Immunofluorescence

**Image 2.** Formalin-fixed and paraffin-embedded rat heart labeled with Anti-phospho-PI3K p85(Tyr467) /p55(Tyr199) Polyclonal Antibody, Unconjugated (ABIN744743) 1:200, overnight at 4°C, The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated used at 1:200 dilution for 40 minutes at 37°C.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Paraformaldehyde-fixed, paraffin embedded rat brain tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-PI3 kinase p85 alpha + gamma (Tyr467+Tyr199) Polyclonal Antibody, Unconjugated at 1:200 overnight at 4°C, followed by a conjugated secondary and DAB staining

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN744743.



**Successfully validated (Western Blotting (WB))**

by [Alamo Laboratories Inc](#)

Report Number: 029801

Date: Aug 26 2014

Lot Number: 120522

Method validated: Western Blotting (WB)

Positive Control: [HeLa G2/M Phase cells](#)

Negative Control: C6/36 cells (non-reactive species)

Notes: A strong band was observed in the positive control sample at the correct molecular weight, this band is absent from the negative control. Several bands were observed in the negative control sample which may represent non-specific binding.

Primary Antibody: - Antigen: PI3K p85 /p55 (pTyr467) - Catalog number: ABIN744743 - Supplier: Bioss - Supplier catalog number: bs-3332R - Lot number: 120522 - Antibody Dilution: 1:200

Secondary Antibody: - Antigen: Goat Anti-Rabbit IgG (H + L)-HRP Conjugate - Supplier: Bio-Rad - Catalog number: #170-6515 - Lot number: L170-6515 - Antibody Dilution: 1:10,000

Controls:

- Positive control: HeLa G2/M Phase Cell Extract
- Negative control: C6/36 Cell Extract
- Preparation of HeLa cells in G2/M phase by Nocodazole treatment: Complete growth medium containing 0.4 µg/mL Nocodazole (Nocodazole stock 1 mg/mL in DMSO at -80 °C) was filtered through sterile 0.2 micron filter. Older complete growth medium from sub-confluent cells (~50% confluent) was replaced with fresh medium containing nocodazole and the cells were left in incubator for another 16 hours. Cells from 1 T150 flask were harvested in 2 mL modified RIPA (with protease and phosphatase inhibitor cocktails) and protein extract prepared.

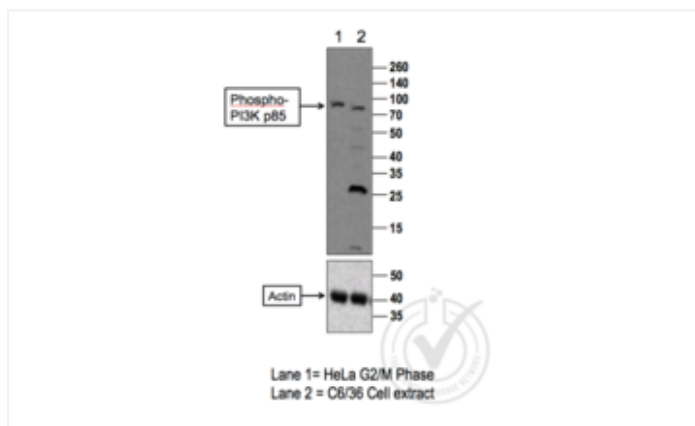
Protocol:

- 1. The cell extracts were heated at 95°C for 5 minutes in 1X SDS Sample Buffer containing 1% SDS and 1.25% β-mercaptoethanol.
- 2. 18 µl of heated culture-media were loaded and resolved on 8-16% SDS-polyacrylamide gel.
- 3. The Thermo Scientific - Spectra Multicolor Broad Range (Cat # 26634) were used as molecular mass markers.
- 4. Proteins were then transferred onto PVDF membrane by wet transfer and protein transfer was confirmed with Ponceau-S staining.
- 5. The PVDF membrane was incubated with 25 ml of blocking buffer [Tris Buffered Saline, pH 7.4 plus 0.1% TW20 (TBST)] containing 5% (W/V) BSA at room temperature for 1 hour.

- 6. The membrane was rinsed with TBST once.
- 7. The membrane was immersed with the protein side up in the primary antibody solution in TBST containing 5% (W/V) BSA and incubated for 10 hours at 4°C.
- 8. The membrane was rinsed in TBST thrice for 5 minutes each.
- 9. The membrane was incubated in the HRP-conjugated secondary antibody solution in TBST containing 5% (W/V) BSA and incubated for 1 hour at room temperature (~26°C) with gentle agitation.
- 10. The membrane was rinsed thrice TBST thrice for 5 minutes each.
- 11. The membrane was rinsed in TBS twice for 30 seconds each.
- 12. Signals were detected with ECL-2 Substrate. The blot was scanned for 15 minutes.
- 13. The membrane was rinsed three times TBST.
- 14. Incubated in Acidic Glycine Stripping Buffer at room temperature with gentle agitation for 3 times, 10 minutes each.
- 15. The membrane was washed in TBST 2 times for 10 minutes each.
- 16. Repeated Steps 5-12 with the loading control antibody (for Anti-actin) and its matching secondary antibody.

Experimental Notes: - No experimental challenges noted.

Image for Validation report #029801



**Validation image no. 1 for anti-Phosphoinositide 3 Kinase, p85 alpha/gamma (PI3K p85a/g) (pTyr199), (pTyr467) antibody (ABIN744743)**

Figure 1: Western Blot for PI3K p85 /p55 (pTyr467). Arrowhead indicates the expected molecular weight of ~85 kDa.