



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)

PIPK II α (m): 293T Lysate: sc-127337

BACKGROUND

Phosphatidylinositol phosphate kinases (PIPKs) synthesize phosphatidylinositol-4,5-bisphosphate, which regulates various processes including cell proliferation, survival, membrane trafficking and cytoskeletal organization. The PIPK family is divided into three different classes, designated type I, type II and type III, each of which contain an activation loop, which determines their enzymatic specificity and subcellular targeting. The type I PIPKs (PIPK I) consist of PIPK I α , β and γ , while the type II PIPKs (PIPK II) consist of PIPK II α and β , both of which exhibit high levels of expression in the brain. Type III PIPK (designated PIP5K III) localizes to the endosome membrane where it participates in endosome-related membrane trafficking and, like other PIPK proteins, generates phosphatidylinositol-4,5-bisphosphate via ATP-dependent phosphorylation. Due to their ability to regulate phosphatidylinositol-4,5-bisphosphate production, the PIPK proteins are essential messengers for signal transduction pathways throughout the body.

REFERENCES

1. Carricaburu, V., et al. 2003. The phosphatidylinositol (PI)-5-phosphate 4-kinase type II enzyme controls Insulin signaling by regulating PI-3,4,5-trisphosphate degradation. *Proc. Natl. Acad. Sci. USA* 100: 9867-9872.
2. Cabezas, A., et al. 2006. Cloning and subcellular localization of a human phosphatidylinositol 3-phosphate 5-kinase, PIKfyve/Fab1. *Gene* 371: 34-41.
3. Rutherford, A.C., et al. 2006. The mammalian phosphatidylinositol 3-phosphate 5-kinase (PIKfyve) regulates endosome-to-TGN retrograde transport. *J. Cell Sci.* 119: 3944-3957.
4. Clarke, J.H., et al. 2007. Type II PtdInsP kinases: location, regulation and function. *Biochem. Soc. Symp.* 149-159.
5. Karataeva, N.A. and Nevinsky, G.A. 2007. Enzymes phosphorylating lipids and polysaccharides. *Biochemistry* 72: 367-379.
6. Kanaho, Y., et al. 2007. The phosphoinositide kinase PIP5K that produces the versatile signaling phospholipid PI4,5P₂. *Biol. Pharm. Bull.* 30: 1605-1609.
7. Sinha, R.K. and Subrahmanyam, G. 2007. Type II phosphatidylinositol 4-kinase(s) in cell signaling cascades. *Indian J. Biochem. Biophys.* 44: 289-294.
8. Weixel, K.M., et al. 2007. Phosphatidylinositol 4-phosphate 5-kinase reduces cell surface expression of the epithelial sodium channel (ENaC) in cultured collecting duct cells. *J. Biol. Chem.* 282: 36534-36542.
9. Nelson, C.D., et al. 2008. β -Arrestin scaffolding of phosphatidylinositol 4-phosphate 5-kinase I α promotes agonist-stimulated sequestration of the β 2-adrenergic receptor. *J. Biol. Chem.* 283: 21093-21101.

CHROMOSOMAL LOCATION

Genetic locus: Pip5k2a (mouse) mapping to 2 A3.

PRODUCT

PIPK II α (m): 293T Lysate represents a lysate of mouse PIPK II α transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PIPK II α (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PIPK II α antibodies. Recommended use: 10-20 μ l per lane.

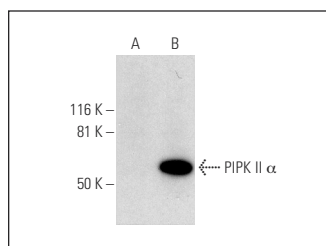
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PIPK II/III (D-3): sc-393246 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PIPK II α expression in PIPK II α transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PIPK II (D-3): sc-393246. Western blot analysis of PIPK II α expression in non-transfected: sc-117752 (A) and mouse PIPK II α transfected: sc-127337 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.