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

SANTA CRUZ BIOTECHNOLOGY, INC.

Pleckstrin (h2): 293T Lysate: sc-170743

BACKGROUND

Activation of protein kinase C (PKC) in platelets results in immediate phosphorylation of Pleckstrin (previously called 40K or P47), the major PKC substrate in platelets. Pleckstrin contains a Ca^{2+}-binding "EF-hand" structure and PKC phosphorylation sites at Ser 113 and Ser 117. The N- and C-termini of Pleckstrin contain two Pleckstrin homology domains (PH), which mediate protein-protein and protein-lipid interactions. Pleckstrin is highly expressed in human neutrophils. Pleckstrin is rapidly phosphorylated following treatment of neutrophils in response to inflammatory stimuli, probably by non-conventional PKC isoforms δ or ξ, which are expressed in human neutrophils. Phosphorylation by non-conventional PKC isoforms induces a conformational change in Pleckstrin that promotes its interaction with membranes and/or with the cytoskeleton, serving to target proteins or lipids recognized by PH domains to sites where they can contribute to the microbicidal response.

REFERENCES

1. Tyers, M., Rachubinski, R.A., Stewart, M.I., Varrichio, A.M., Shorr, R.G., Haslam, R.J. and Harley, C.B. 1988. Molecular cloning and expression of the major protein kinase C substrate of platelets. Nature 333: 470-473.
2. Tyers, M., Haslam, R.J., Rachubinski, R.A. and Harley, C.B. 1989. Molecular analysis of Pleckstrin: the major protein kinase C substrate of platelets. J. Cell. Biochem. 40: 133-145.
3. Yoon, H.S., Hajduk, P.J., Petros, A.M., Olejniczak, E.T., Meadows, R.P. and Fesik, S.W. 1994. Solution structure of a Pleckstrin-homology domain. Nature 369: 672-675.
4. Abrams, C.S., Zhao, W., Belmonte, E. and Brass, L.F. 1995. Protein kinase C regulates Pleckstrin by phosphorylation of sites adjacent to the N-terminal Pleckstrin homology domain. J. Biol. Chem. 270: 23317-23321.
5. Craig, K.L. and Harley, C.B. 1996. Phosphorylation of human Pleckstrin on Ser 113 and Ser 117 by protein kinase C. Biochem. J. 314: 937-942.
6. Brumell, J.H., Craig, K.L., Ferguson, D., Tyers, M. and Grinstein, S. 1997. Phosphorylation and subcellular redistribution of Pleckstrin in human neutrophils. J. Immunol. 158: 4862-4871.
7. Cmarik, J.L., Hegamyer, G., Gerrard, B., Dean, M. and Colburn, N.H. 2000. cDNA cloning and mapping of mouse Pleckstrin (Plek), a gene upregulated in transformation-resistant cells. Genomics 66: 204-212.

CHROMOSOMAL LOCATION

Genetic locus: PLEK (human) mapping to 2p14.

PRODUCT

Pleckstrin (h2): 293T Lysate represents a lysate of human Pleckstrin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Pleckstrin (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Pleckstrin antibodies. Recommended use: 10-20 µl per lane.

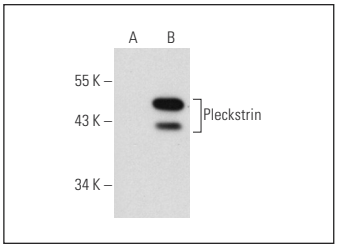
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Pleckstrin (227.1): sc-100813 is recommended as a positive control antibody for Western Blot analysis of enhanced human Pleckstrin expression in Pleckstrin 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



Pleckstrin (227.1): sc-100813. Western blot analysis of Pleckstrin expression in non-transfected: sc-117752 (**A**) and human Pleckstrin transfected: sc-170743 (**B**) 293T whole cell lysates.

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.