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Produktinformation

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- Diagnostik & molekulare Diagnostik
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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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- 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.

IP3KB (h): 293T Lysate: sc-373437

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Inositol 1,4,5-trisphosphate (Ins(1,4,5)P3) regulates the level of calcium within the cell by releasing calcium from intracellular stores. Ins(1,4,5)P3 is phosphorylated by inositol 1,4,5-trisphosphate 3-kinase (IP3K) to form inositol 1,3,4,5-tetrakisphosphate (Ins(1,4,5)P4), which is is thought to regulate the influx of calcium across the plasma membrane. IP3K exists as three isoforms, IP3KA, B, and C. IP3KA, the most highly characterized isoform, is expressed in rat brain and testis. IP3KB is expressed in various rat tissues such as lung, thymus, testis, brain, and heart. IP3K activity is stimulated in the presence of calmodulin via phosphorylation by cAMP-dependent protein kinase, protein kinase C, or calcium/calmodulin dependent protein kinase II and, subsequently, mediates the inositol phosphate signaling pathways.

REFERENCES

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2. Berridge, M.J. and Irvine, R.F. 1989. Inositol phosphates and cell signaling. Nature 341: 197-205.
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4. Takazawa, K., Vandekerckhove, J., Dumont, J.E. and Erneux, C. 1990. Cloning and expression in *Escherichia coli* of a rat brain cDNA encoding a Ca^{2+}/calmodulin-sensitive inositol 1,4,5-trisphosphate 3-kinase. Biochem. J. 272: 107-112.
5. Irvine, R.F. 1991. Inositol tetrakisphosphate as a second messenger: confusions, contradictions, and a potential resolution. Bioessays 13: 419-427.
6. Vanweyenberg, V., Communi, D., D'Santos, C.S. and Erneux, C. 1995. Tissue and cell-specific expression of Ins(1,4,5)P3 3-kinase isoenzymes. Biochem. J. 306: 429-435.
7. Woodring, P.J. and Garrison, J.C. 1997. Expression, purification, and regulation of two isoforms of the inositol 1,4,5-trisphosphate 3-kinase. J. Biol. Chem. 272: 30447-30454.

CHROMOSOMAL LOCATION

Genetic locus: ITPKB (human) mapping to 1q42.12.

PRODUCT

IP3KB (h): 293T Lysate represents a lysate of human IP3KB 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.

RESEARCH USE

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

APPLICATIONS

IP3KB (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive IP3KB 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.

PROTOCOLS

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