SANTA CRUZ BIOTECHNOLOGY, INC.

IPPK (C-18): sc-82200

BACKGROUND

IPPK (Inositol-pentakisphosphate 2-kinase) is a 491 amino acid gene product that belongs to the IPK1 type 2 family. IPPK expresses the conserved EXKPK motif which is found in both inositol-pentakisphosphate 2-kinase families 1 and 2. The primary function of IPPK has been found to be the ATP dependent phosphorylation of Ins(1,3,4,5,6)P5 at position 2 to form Ins(1,2,3,4,5,6)P6 (InsP6 or phytate). In plants, phytic acid (myo-inositol hexakisphosphate, InsP6) is an important molecule for phosphate storage and signaling. Mutation of the InsP6 gene can cause plants to be of greater susceptibility to many viral pathogens. In mice, InsP6 is believed to influence endocytosis and mRNA export. Homozygous mutations of the IPPK gene will prevent yolk sac development, indicating the importance of this gene product. IPPK is a ubiquitously expressed protein with highest expression found in heart, testis and brain.

REFERENCES

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5. Gao, Y. and Wang, H.Y. 2007. Inositol pentakisphosphate mediates Wnt/β-catenin signaling. J. Biol. Chem. 282: 26490-26502.
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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: IPPK (human) mapping to 9q22.31; Ippk (mouse) mapping to 13 A5.

SOURCE

IPPK (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IPPK of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82200 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IPPK (C-18) is recommended for detection of IPPK of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

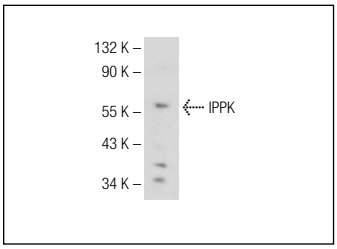
IPPK (C-18) is also recommended for detection of IPPK in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for IPPK siRNA (h): sc-75343, IPPK siRNA (m): sc-75344, IPPK shRNA Plasmid (h): sc-75343-SH, IPPK shRNA Plasmid (m): sc-75344-SH, IPPK shRNA (h) Lentiviral Particles: sc-75343-V and IPPK shRNA (m) Lentiviral Particles: sc-75344-V.

Molecular Weight of IPPK: 56 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

DATA



IPPK (C-18): sc-82200. Western blot analysis of IPPK expression in IMR-32 whole cell lysate.

PROTOCOLS

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