

HISPPD1 (P-12): sc-168085

BACKGROUND

HISPPD1 (histidine acid phosphatase domain-containing protein 1), also known as PPIP5K2 (diphosphoinositol pentakisphosphate kinase 2), VIP2 or KIAA0433, is a 1,243 amino acid cytoplasmic protein that belongs to the histidine acid phosphatase family and VIP1 subfamily. Acting as an inositol kinase, HISPPD1 catalyzes the formation of diphosphoinositol pentakisphosphate (InsP7) and bi-diphosphoinositol tetrakisphosphate (InsP8) by converting inositol hexakisphosphate (InsP6) into InsP7, and InsP7 into InsP8. Existing as two alternatively spliced isoforms, the gene encoding HISPPD1 maps to human chromosome 5q21.1 and mouse chromosome 1 D. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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3. Fridy, P.C., et al. 2007. Cloning and characterization of two human VIP1-like inositol hexakisphosphate and diphosphoinositol pentakisphosphate kinases. J. Biol. Chem. 282: 30754-30762.
4. Choi, J.H., et al. 2007. Purification, sequencing, and molecular identification of a mammalian PP-InsP5 kinase that is activated when cells are exposed to hyperosmotic stress. J. Biol. Chem. 282: 30763-30775.
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CHROMOSOMAL LOCATION

Genetic locus: PPIP5K2 (human) mapping to 5q21.1; Ppip5k2 (mouse) mapping to 1 D.

SOURCE

HISPPD1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HISPPD1 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-168085 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HISPPD1 (P-12) is recommended for detection of HISPPD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with HISPPD2A.

Suitable for use as control antibody for HISPPD1 siRNA (h): sc-91902, HISPPD1 siRNA (m): sc-145973, HISPPD1 shRNA Plasmid (h): sc-91902-SH, HISPPD1 shRNA Plasmid (m): sc-145973-SH, HISPPD1 shRNA (h) Lentiviral Particles: sc-91902-V and HISPPD1 shRNA (m) Lentiviral Particles: sc-145973-V.

Molecular Weight of HISPPD1 isoforms 1/2: 140/138 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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