SANTA CRUZ BIOTECHNOLOGY, INC.

HISPPD2A (P-18): sc-164594

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The Power to Question

BACKGROUND

HISPPD2A (histidine acid phosphatase domain-containing protein 2A), also known as PPIP5K1 (diphosphoinositol pentakisphosphate kinase 1), IP6K, KIAA0377 or VIP1, is a 1,433 amino acid protein that belongs to the histidine acid phosphatase family and VIP1 subfamily. Localizing to the cytoplasm, HISPPD2A is widely expressed, with highest levels of expression in skeletal muscle, heart and brain. HISPPD2A catalyzes the formation of diphosphoinositol pentakisphosphate (InsP7) and bi-diphosphoinositol tetrakisphosphate (InsP8) by converting inositolitol hexakisphosphate (InsP6) into InsP7, and InsP7 into InsP8. Existing as seven alternatively spliced isoforms, HISPPD2A may have an important role for intracellular signaling pathways. The gene encoding HISPPD2A maps to human chromosome 15, which additionally contains a HISPPD2A pseudogene.

REFERENCES

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5. Maegawa, G.H., et al. 2007. Pyrimethamine as a potential pharmacological chaperone for late-onset forms of GM2 gangliosidosis. J. Biol. Chem. 282: 9150-9161.
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CHROMOSOMAL LOCATION

Genetic locus: PPIP5K1 (human) mapping to 15q15.3; Hisppd2a (mouse) mapping to 2 E5.

SOURCE

HISPPD2A (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HISPPD2A 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-164594 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HISPPD2A (P-18) is recommended for detection of HISPPD2A 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); non cross-reactive with HISPPD1.

HISPPD2A (P-18) is also recommended for detection of HISPPD2A in additional species, including canine and porcine.

Suitable for use as control antibody for HISPPD2A siRNA (h): sc-90149, HISPPD2A siRNA (m): sc-145974, HISPPD2A shRNA Plasmid (h): sc-90149-SH, HISPPD2A shRNA Plasmid (m): sc-145974-SH, HISPPD2A shRNA (h) Lentiviral Particles: sc-90149-V and HISPPD2A shRNA (m) Lentiviral Particles: sc-145974-V.

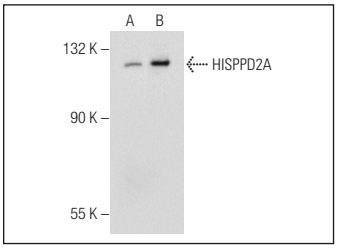
Molecular Weight of HISPPD2A: 160 kDa.

Positive Controls: HISPPD2A (h): sc-116049.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HISPPD2A (P-18): sc-164594. Western blot analysis of HISPPD2A expression in non-transfected: sc-117752 (**A**) and human HISPPD2A transfected: sc-116049 (**B**) 293T whole cell lysates.

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.