SANTA CRUZ BIOTECHNOLOGY, INC.

ATP10D (K-14): sc-161369

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ATP10D (ATPase class V type 10D), also known as ATPVD, is a 1,426 amino acid multi-pass membrane protein belonging to the cation transport ATPase (P-type) family and type IV subfamily. Expressed in placenta, ATP10D is found at a lesser extent in kidney and catalyzes the reaction of ATP and water to ADP and phosphate. ATP10D exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 4, which represents approximately 6% of the human genome and contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

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CHROMOSOMAL LOCATION

Genetic locus: ATP10D (human) mapping to 4p12; Atp10d (mouse) mapping to 5 C3.2.

SOURCE

ATP10D (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ATP10D 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-161369 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ATP10D (K-14) is recommended for detection of ATP10D 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 other ATP10 family members.

ATP10D (K-14) is also recommended for detection of ATP10D in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ATP10D siRNA (h): sc-89171, ATP10D siRNA (m): sc-141334, ATP10D shRNA Plasmid (h): sc-89171-SH, ATP10D shRNA Plasmid (m): sc-141334-SH, ATP10D shRNA (h) Lentiviral Particles: sc-89171-V and ATP10D shRNA (m) Lentiviral Particles: sc-141334-V.

Molecular Weight of ATP10D: 160 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.