

ARH3 (H-315): sc-292053

BACKGROUND

ARH3 (ADP-ribosylhydrolase 3), also known as ADPRHL2 (ADP-ribosylhydrolase like 2), is a 363 amino acid protein that localizes to mitochondria, as well as to both the cytoplasm and the nucleus, and belongs to the ADP-ribosylglycohydrolase family. Expressed ubiquitously, ARH3 uses magnesium as a cofactor to catalyze the hydrolysis of poly(ADP-ribose) that is synthesized after DNA damage. Via its catalytic activity, ARH3 generates ADP-ribose from poly(ADP-ribose) and is thought to play an important role in the maintenance of normal neuronal cell function. The gene encoding ARH3 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ADPRHL2 (human) mapping to 1p34.3; Adprh2 (mouse) mapping to 4 D2.2.

SOURCE

ARH3 (H-315) is a rabbit polyclonal antibody raised against amino acids 18-332 mapping within an internal region of ARH3 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.

APPLICATIONS

ARH3 (H-315) is recommended for detection of ARH3 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).

ARH3 (H-315) is also recommended for detection of ARH3 in additional species, including bovine and porcine.

Suitable for use as control antibody for ARH3 siRNA (h): sc-78611, ARH3 siRNA (m): sc-141198, ARH3 shRNA Plasmid (h): sc-78611-SH, ARH3 shRNA Plasmid (m): sc-141198-SH, ARH3 shRNA (h) Lentiviral Particles: sc-78611-V and ARH3 shRNA (m) Lentiviral Particles: sc-141198-V.

Molecular Weight of ARH3: 39 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.