

ARP (I-16): sc-34561

BACKGROUND

The gene encoding arginine-rich protein (ARP), also designated ARMET, which is highly conserved in all species, localizes to human chromosome 3p21.2. Mutation of ARP occurs in several human tumors, including primary head and neck, non-small-cell lung, renal cell, breast and prostate cancers. Previously, malignancy of the ARP gene was thought to be the result of frequent variations of the triplet AGG repeat around codon 50, but studies showed no significant difference in this variation between normal and cancer patient populations. Subsequently, it has been shown that the ARP protein contains a smaller N-terminal region, which does not include the arginine-rich region, and that codon 50 actually is the start codon for the protein. A function for the ARP protein has yet to be determined.

REFERENCES

1. Shridhar, V., et al. 1996. A gene from human chromosomal band 3p21.1 encodes a highly conserved arginine-rich protein and is mutated in renal cell carcinomas. *Oncogene* 12: 1931-1939.
2. Evron, E., et al. 1997. Normal polymorphism in the incomplete trinucleotide repeat of the arginine-rich protein gene. *Cancer Res.* 57: 2888-2889.
3. Shridhar, V., et al. 1997. Mutations in the arginine-rich protein gene (ARP) in pancreatic cancer. *Oncogene* 14: 2213-2216.
4. Tanaka, H., et al. 2000. Polymorphic variation of the ARP gene on 3p21 in Japanese esophageal cancer patients. *Oncol. Rep.* 7: 591-593.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601916. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: MANF (human) mapping to 3p21.2; Manf (mouse) mapping to 9 F1.

SOURCE

ARP (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARP 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-34561 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ARP (I-16) is recommended for detection of arginine-rich protein 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).

ARP (I-16) is also recommended for detection of arginine-rich protein in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARP siRNA (h): sc-45435, ARP siRNA (m): sc-45436, ARP shRNA Plasmid (h): sc-45435-SH, ARP shRNA Plasmid (m): sc-45436-SH, ARP shRNA (h) Lentiviral Particles: sc-45435-V and ARP shRNA (m) Lentiviral Particles: sc-45436-V.

Molecular Weight of ARP: 20 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.

RESEARCH USE

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