SANTA CRUZ BIOTECHNOLOGY, INC.

ARP (H-6): sc-515907

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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., Rivard, S., Shridhar, R., Mullins, C., Bostick, L., Sakr, W., Grignon, D., Miller, O.J. and Smith, D.I. 1996. A gene from human chromosomal band 3p21.2 encodes a highly conserved arginine-rich protein and is mutated in renal cell carcinomas. Oncogene 12: 1931-1939.
2. Evron, E., Cairns, P., Halachmi, N., Ahrendt, S.A., Reed, A.L.and Sidransky, D. 1997. Normal polymorphism in the incomplete trinucleotide repeat of the arginine-rich protein gene. Cancer Res. 57: 2888-2889.
3. Shridhar, V., Rivard, S., Wang, X., Shridhar, R., Paisley, C., Mullins, C., Beirnat, L., Dugan, M., Sarkar, F., Miller, O.J., Vaitkevicius, V.K. and Smith, D.I. 1997. Mutations in the arginine-rich protein gene (ARP) in pancreatic cancer. Oncogene 14: 2213-2216.
4. Tanaka, H., Shimada, Y., Harada, H., Shinoda, M., Hatooka, S., Imamura, M. and Ishizaki, K. 2000. Polymorphic variation of the ARP gene on 3p21.2 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 (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 88-107 within an internal region of ARP of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

ARP (H-6) is recommended for detection of ARP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

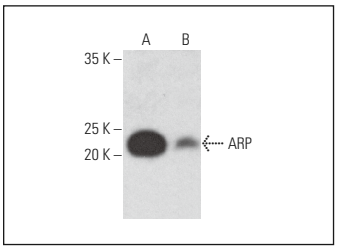
Molecular Weight of ARP: 20 kDa.

Positive Controls: M1 whole cell lysate: sc-364782, C32 whole cell lysate: sc-2205 or ARPE-19 whole cell lysate: sc-364357.

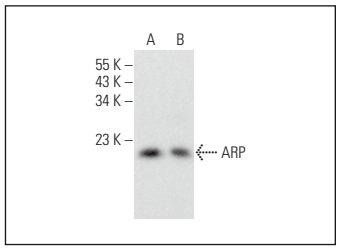
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ARP (H-6): sc-515907. Western blot analysis of ARP expression in C32 (**A**) and ARPE-19 (**B**) whole cell lysates.



ARP (H-6): sc-515907. Western blot analysis of ARP expression in M1 (**A**) and F9 (**B**) whole cell lysates.

PROTOCOLS

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