SANTA CRUZ BIOTECHNOLOGY, INC.

AMAP-1 (G-9): sc-390415

BACKGROUND

AMAP-1 (AMY-1-binding protein 1), also known as AMAM-1 or MYCBPAP (MYCBP associated protein), is a 947 amino acid protein that is expressed specifically in testis and is involved in spermatogenesis and synaptic processes. AMAP-1 colocalizes with MYCBP (AMY-1) in cytoplasm and also localizes to membrane. The gene encoding AMAP-1 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

1. Ikehara, Y., et al. 1999. Cloning and expression of a human gene encoding an N-acetylgalactosamine-α2,6-sialyltransferase (ST6GalNAc I): a candidate for synthesis of cancer-associated sialyl-Tn antigens. Glycobiology 9: 1213-1224.
2. Lee, Y.C., et al. 1999. Molecular cloning and functional expression of two members of mouse NeuAcα2,3Galβ1,3GalNAc GalNAcα2,6-sialyltransferase family, ST6GalNAc III and IV. J. Biol. Chem. 274: 11958-11967.
3. Julien, S., et al. 2001. Expression of sialyl-Tn antigen in breast cancer cells transfected with the human CMP-Neu5Ac: GalNAc α2,6-sialyltransferase (ST6GalNac I) cDNA. Glycoconj. J. 18: 883-893.

CHROMOSOMAL LOCATION

Genetic locus: MYCBPAP (human) mapping to 17q21.33; Mycbpap (mouse) mapping to 11 D.

SOURCE

AMAP-1 (G-9) is a mouse monoclonal antibody raised against amino acids 633-932 mapping at the C-terminus of AMAP-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AMAP-1 (G-9) is available conjugated to agarose (sc-390415 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390415 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390415 PE), fluorescein (sc-390415 FITC), Alexa Fluor® 488 (sc-390415 AF488), Alexa Fluor® 546 (sc-390415 AF546), Alexa Fluor® 594 (sc-390415 AF594) or Alexa Fluor® 647 (sc-390415 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390415 AF680) or Alexa Fluor® 790 (sc-390415 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

AMAP-1 (G-9) is recommended for detection of AMAP-1 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 AMAP-1 siRNA (h): sc-93793, AMAP-1 siRNA (m): sc-141038, AMAP-1 shRNA Plasmid (h): sc-93793-SH, AMAP-1 shRNA Plasmid (m): sc-141038-SH, AMAP-1 shRNA (h) Lentiviral Particles: sc-93793-V and AMAP-1 shRNA (m) Lentiviral Particles: sc-141038-V.

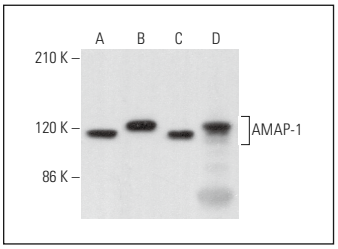
Molecular Weight of AMAP-1: 108 kDa.

Positive Controls: mouse testis extract: sc-2405, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

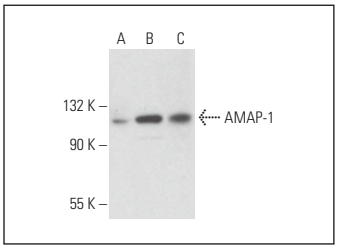
RECOMMENDED SUPPORT REAGENTS

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



AMAP-1 (G-9): sc-390415. Western blot analysis of AMAP-1 expression in F9 (**A**), NIH/3T3 (**B**) and AT3B-1 (**C**) whole cell lysates and mouse testis tissue extract (**D**).



AMAP-1 (G-9): sc-390415. Western blot analysis of AMAP-1 expression in F9 (**A**), SW480 (**B**) and SK-BR-3 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chen, J., et al. 2025. CFAP65 is essential for C2a projection integrity in axonemes: implications for organ-specific ciliary dysfunction and infertility. Cell. Mol. Life Sci. 82: 61.

STORAGE

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