

AMAP-1 (E-5): sc-377495

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

- Ikehara, Y., et al. 1999. Cloning and expression of a human gene encoding an N-acetylgalactosamine- α 2,6-sialyltransferase (ST6GalNAc I): a candidate for synthesis of cancer-associated sialyl-Tn antigens. *Glycobiology* 9: 1213-1224.
- Lee, Y.C., et al. 1999. Molecular cloning and functional expression of two members of mouse NeuAc α 2,3Gal β 1,3GalNAc GalNAc α 2,6-sialyltransferase family, ST6GalNAc III and IV. *J. Biol. Chem.* 274: 11958-11967.
- Julien, S., et al. 2001. Expression of sialyl-Tn antigen in breast cancer cells transfected with the human CMP-Neu5Ac: GalNAc α 2,6-sialyltransferase (ST6GalNAc I) cDNA. *Glycoconj. J.* 18: 883-893.
- Yukitake, H., et al. 2002. AMAP-1, a novel testis-specific AMY-1-binding protein, is differentially expressed during the course of spermatogenesis. *Biochim. Biophys. Acta* 1577: 126-132.

CHROMOSOMAL LOCATION

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

SOURCE

AMAP-1 (E-5) is a mouse monoclonal antibody raised against amino acids 648-947 mapping at the C-terminus of AMAP-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AMAP-1 (E-5) is available conjugated to agarose (sc-377495 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377495 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377495 PE), fluorescein (sc-377495 FITC), Alexa Fluor[®] 488 (sc-377495 AF488), Alexa Fluor[®] 546 (sc-377495 AF546), Alexa Fluor[®] 594 (sc-377495 AF594) or Alexa Fluor[®] 647 (sc-377495 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-377495 AF680) or Alexa Fluor[®] 790 (sc-377495 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

AMAP-1 (E-5) 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 μ g per 100-500 μ g 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.

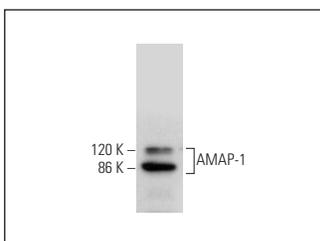
Molecular Weight of AMAP-1: 108 kDa.

Positive Controls: Hs 181 Tes whole cell lysate: sc-364779 or NIH/3T3 whole cell lysate: sc-2210.

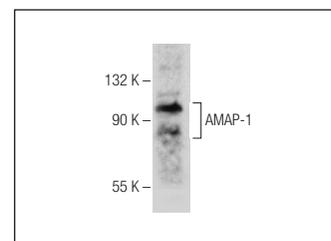
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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 (E-5): sc-377495. Western blot analysis of AMAP-1 expression in NIH/3T3 whole cell lysate.



AMAP-1 (E-5): sc-377495. Western blot analysis of AMAP-1 expression in HS 181 Tes whole cell lysate.

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 for detailed protocols and support products.

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