

API5 (E-12): sc-374528

BACKGROUND

API5 (apoptosis inhibitor 5), also known as AAC11 (antiapoptosis clone 11 protein), FIF (fibroblast growth factor 2-interacting factor), MIG8, XAGL or API5L1, is a widely expressed antiapoptotic nuclear protein that is highly conserved from flies to humans. API5 contains a nuclear localization sequence, an LxxLL motif, a leucine zipper domain and a transactivation domain flanked by two acidic domains. API5 forms a nuclear localized complex with FGF-2 and may mediate FGF-2-dependent signaling. API5 is believed to function as a transcription regulator and is able to regulate the synthesis of MMP-2 (matrix metalloproteinase-2). In addition, API5 is known to specifically suppress E2F-dependent apoptosis. It is expressed in a variety of cancer cell lines and its expression is linked to tumor progression and the degree of malignancy.

REFERENCES

1. Tewari, M., et al. 1997. AAC-11, a novel cDNA that inhibits apoptosis after growth factor withdrawal. *Cancer Res.* 57: 4063-4069.
2. Lu, K.P., et al. 1998. Identification of genes differentially expressed in vascular smooth muscle cells following benzo[a]pyrene challenge: implications for chemical atherogenesis. *Biochem. Biophys. Res. Commun.* 253: 828-833.
3. Gianfrancesco, F., et al. 1999. Molecular cloning and fine mapping of API5L1, a novel human gene strongly related to an antiapoptotic gene. *Cytogenet. Cell Genet.* 84: 164-166.
4. Van den Berghe, L., et al. 2000. FIF [fibroblast growth factor-2 (FGF-2)-interacting-factor], a nuclear putatively antiapoptotic factor, interacts specifically with FGF-2. *Mol. Endocrinol.* 14: 1709-1724.

CHROMOSOMAL LOCATION

Genetic locus: API5 (human) mapping to 11p12; Api5 (mouse) mapping to 2 E1.

SOURCE

API5 (E-12) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of API5 of human origin.

PRODUCT

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

API5 (E-12) is available conjugated to agarose (sc-374528 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374528 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374528 PE), fluorescein (sc-374528 FITC), Alexa Fluor[®] 488 (sc-374528 AF488), Alexa Fluor[®] 546 (sc-374528 AF546), Alexa Fluor[®] 594 (sc-374528 AF594) or Alexa Fluor[®] 647 (sc-374528 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374528 AF680) or Alexa Fluor[®] 790 (sc-374528 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

API5 (E-12) is recommended for detection of API5 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 API5 siRNA (h): sc-96495, API5 siRNA (m): sc-141153, API5 shRNA Plasmid (h): sc-96495-SH, API5 shRNA Plasmid (m): sc-141153-SH, API5 shRNA (h) Lentiviral Particles: sc-96495-V and API5 shRNA (m) Lentiviral Particles: sc-141153-V.

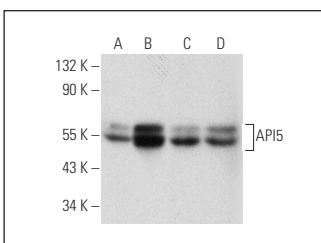
Molecular Weight of API5: 55 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

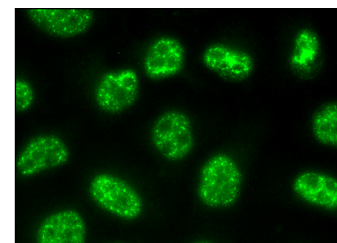
RECOMMENDED SUPPORT REAGENTS

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



API5 (E-12): sc-374528. Western blot analysis of API5 expression in HeLa (A), NTERA-2 cl.D1 (B), U-698-M (C) and K-562 (D) whole cell lysates.



API5 (E-12): sc374528. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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.