

API5 (N-13): sc-167094

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.
5. Kim, J.W., et al. 2000. AAC-11 overexpression induces invasion and protects cervical cancer cells from apoptosis. *Lab. Invest.* 80: 587-594.
6. Sasaki, H., et al. 2001. Expression of the antiapoptosis gene, AAC-11, as a prognosis marker in non-small cell lung cancer. *Lung Cancer* 34: 53-57.
7. Morris, E.J., et al. 2006. Functional identification of Api5 as a suppressor of E2F-dependent apoptosis *in vivo*. *PLoS Genet.* 2: e196-e196.

CHROMOSOMAL LOCATION

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

SOURCE

API5 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of API5 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-167094 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

API5 (N-13) is recommended for detection of API5 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).

API5 (N-13) is also recommended for detection of API5 in additional species, including porcine.

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.

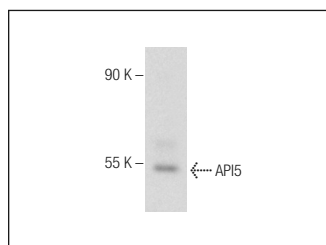
Molecular Weight of API5: 55 kDa.

Positive Controls: Y79 nuclear extract: sc-2126 or HeLa nuclear extract: sc-2120.

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.

DATA



API5 (N-13): sc-167094. Western blot analysis of API5 expression in Y79 nuclear extract.

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 or our catalog for detailed protocols and support products.