

AXUD1 (2055E3a): sc-81191

BACKGROUND

Axin, an important regulator of β -catenin, is frequently mutated in human hepatocellular carcinomas (HCCs). Transduction of the wild-type Axin gene (AXIN1) induces apoptosis in colon cancer cells as well as in HCC cells. Axin-1 upregulated gene 1 protein (AXUD1), also designated TGF- β -induced apoptosis protein 3 (TAIP-3) or URAX1, is ubiquitously expressed, but highest levels are detected in placenta, lung, skeletal muscle, leukocytes and pancreas. AXUD1 has increased expression in response to exogenously expressed AXIN1 and localizes primarily to the nucleus. It is downregulated in kidney, lung, liver and colon cancers compared with corresponding unaffected tissues, which implicates that AXUD1 may function as a tumor-suppressor in these organs. AXUD1 may also be involved in apoptosis.

REFERENCES

1. Hart, M.J., et al. 1998. Downregulation of β -catenin by human Axin and its association with the APC tumor suppressor, β -catenin and GSK3 β . *Curr. Biol.* 8: 573-581.
2. Satoh, S., et al. 2000. AXIN1 mutations in hepatocellular carcinomas, and growth suppression in cancer cells by virus-mediated transfer of AXIN1. *Nat. Genet.* 24: 245-250.
3. Ishiguro, H., et al. 2001. Identification of AXUD1, a novel human gene induced by AXIN1 and its reduced expression in human carcinomas of the lung, liver, colon and kidney. *Oncogene* 20: 5062-5066.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606458. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Yi, X., et al. 2006. Transcriptional analysis of doxorubicin-induced cardiotoxicity. *Am. J. Physiol. Heart Circ. Physiol.* 290: H1098-H1102.

CHROMOSOMAL LOCATION

Genetic locus: CSRP1 (human) mapping to 3p22.2.

SOURCE

AXUD1 (2055E3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of AXUD1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

APPLICATIONS

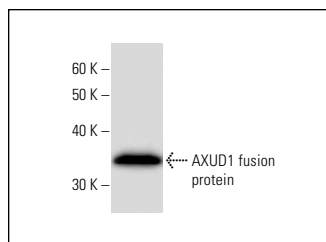
AXUD1 (2055E3a) is recommended for detection of AXUD1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for AXUD1 siRNA (h): sc-60237, AXUD1 shRNA Plasmid (h): sc-60237-SH and AXUD1 shRNA (h) Lentiviral Particles: sc-60237-V.

Molecular Weight of AXUD1: 64 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

DATA



AXUD1 (2055E3a): sc-81191. Western Blot analysis of human recombinant AXUD1 fusion protein.

SELECT PRODUCT CITATIONS

1. Macdonald, C.D., et al. 2018. Cytokine-induced cysteine- serine-rich nuclear protein-1 (CSRP1) selectively contributes to MMP1 expression in human chondrocytes. *PLoS ONE* 13: e0207240.

PROTOCOLS

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