

# ASNSD1 (C-7): sc-374190

## BACKGROUND

ASNSD1 (Asparagine synthetase domain containing 1), also known as HCV NS3-transactivated protein 1 or NS3TP1, is a 643 amino acid protein containing one Asparagine synthetase domain and a glutamine amidotransferase type-2 domain. The gene encoding ASNSD1 maps to human chromosome 2, the second largest human chromosome, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

## REFERENCES

1. Baldini, A., et al. 1993. An alphoid DNA sequence conserved in all human and great ape chromosomes: evidence for ancient centromeric sequences at human chromosomal regions 2q21 and 9q13. *Hum. Genet.* 90: 577-583.
2. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.

## CHROMOSOMAL LOCATION

Genetic locus: ASNSD1 (human) mapping to 2q32.2; Asnsd1 (mouse) mapping to 1 C1.1.

## SOURCE

ASNSD1 (C-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 215-547 near the C-terminus of ASNSD1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ASNSD1 (C-7) is available conjugated to agarose (sc-374190 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374190 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374190 PE), fluorescein (sc-374190 FITC), Alexa Fluor® 488 (sc-374190 AF488), Alexa Fluor® 546 (sc-374190 AF546), Alexa Fluor® 594 (sc-374190 AF594) or Alexa Fluor® 647 (sc-374190 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374190 AF680) or Alexa Fluor® 790 (sc-374190 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374190 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

ASNSD1 (C-7) is recommended for detection of ASNSD1 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 ASNSD1 siRNA (h): sc-94342, ASNSD1 siRNA (m): sc-141302, ASNSD1 shRNA Plasmid (h): sc-94342-SH, ASNSD1 shRNA Plasmid (m): sc-141302-SH, ASNSD1 shRNA (h) Lentiviral Particles: sc-94342-V and ASNSD1 shRNA (m) Lentiviral Particles: sc-141302-V.

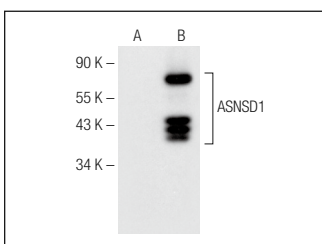
Molecular Weight of ASNSD1: 72 kDa.

Positive Controls: mouse brain extract: sc-2253 or ASNSD1 (m): 293T Lysate: sc-118590.

## 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



ASNSD1 (C-7): sc-374190. Western blot analysis of ASNSD1 expression in non-transfected: sc-117752 (A) and mouse ASNSD1 transfected: sc-118590 (B) 293T whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.