# ASNSD1 (E-13): sc-160966



The Power to Question

#### **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 icthyosis, 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**

- 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.
- 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.
- Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. J. Med. Genet. 37: E8.
- Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. Cytogenet. Cell Genet. 92: 204-208.

#### CHROMOSOMAL LOCATION

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

## SOURCE

ASNSD1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ASNSD1 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160966 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

#### **APPLICATIONS**

ASNSD1 (E-13) is recommended for detection of ASNSD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 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.

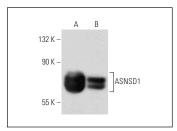
Molecular Weight of ASNSD1: 72 kDa.

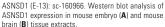
Positive Controls: ASNSD1 (m): 293T Lysate: sc-118590, mouse embryo extract: sc-364239 or mouse brain extract: sc-2253.

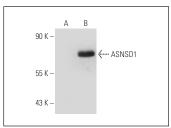
#### **RECOMMENDED SECONDARY REAGENTS**

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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







ASNSD1 (E-13): sc-160966. Western blot analysis of ASNSD1 expression in non-transfected: sc-117752 (A) and mouse ASNSD1 transfected: sc-118590 (B) 293T whole cell Ivsates.

## **RESEARCH USE**

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

MONOS Satisfation Guaranteed

Try **ASNSD1 (C-7):** sc-374190 or **ASNSD1 (A-10):** sc-398765, our highly recommended monoclonal alternatives to ASNSD1 (E-13).