# HYLS1 (N-14): sc-161721



The Power to Question

# **BACKGROUND**

The hydrolethalus syndrome protein 1 (HYLS1) is a widely conserved protein that plays an essential role in cilia formation. A single amino acid mutation in th HYLS1 gene leads to a perinatal lethal disorder termed hydrolethalus syndrome, a severe fetal malformation syndrome characterized by central nervous system (CNS) malformation such as hydrocephaly and absent midline structures of the brain, micrognathia, defective lobation of the lungs and polydactyly. The gene encoding HYLS1 maps to human chromosome 11, which which makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: HYLS1 (human) mapping to 11q24.2; Hyls1 (mouse) mapping to 9 A4.

#### **SOURCE**

HYLS1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HYLS1 of human origin.

# **STORAGE**

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

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-161721 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

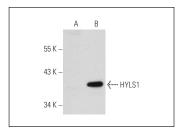
HYLS1 (N-14) is recommended for detection of HYLS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution 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 HYLS1 siRNA (h): sc-96710, HYLS1 shRNA Plasmid (h): sc-96710-SH and HYLS1 shRNA (h) Lentiviral Particles: sc-96710-V

Molecular Weight of HYLS1: 40 kDa.

Positive Controls: HYLS1 (h): 293 Lysate: sc-111891.

# **DATA**



HYLS1 (N-14): sc-161721. Western blot analysis of HYLS1 expression in non-transfected: sc-110760 (A) and human HYLS1 transfected: sc-111891 (B) 293 whole self-livestee.

# **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.

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