

ASH1L (H-228): sc-98301

BACKGROUND

ASH1L (absent small and homeotic disks protein 1 homolog) is a 2,969 amino acid protein encoded by the human gene ASH1L. ASH1L belongs to the histone-lysine methyltransferase family (SET2 subfamily) and contains three AT hook DNA-binding domains, one AWS domain, one BAH domain, one bromo domain, one PHD-type zinc finger, one post-SET domain and one SET domain. It is a widely expressed nuclear protein with highest expression found in brain, heart and kidney. ASH1L is a histone methyltransferase and is believed to methylate Lys 4 of Histone H3, which is a specific tag for epigenetic transcriptional activation.

REFERENCES

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3. Schotta, G., Lachner, M., Peters, A.H. and Jenuwein, T. 2004. The indexing potential of histone lysine methylation. *Novartis Found. Symp.* 259: 22-37.
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6. Gregory, G.D., Vakoc, C.R., Rozovskaia, T., Zheng, X., Patel, S., Nakamura, T., Canaani, E. and Blobel, G.A. 2007. Mammalian ASH1L is a histone methyltransferase that occupies the transcribed region of active genes. *Mol. Cell. Biol.* 27: 8466-8479.

CHROMOSOMAL LOCATION

Genetic locus: ASH1L (human) mapping to 1q22; Ash1l (mouse) mapping to 3 F1.

SOURCE

ASH1L (H-228) is a rabbit polyclonal antibody raised against amino acids 281-508 mapping near the N-terminus of ASH1L 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98301 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

ASH1L (H-228) is recommended for detection of ASH1L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

ASH1L (H-228) is also recommended for detection of ASH1L in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ASH1L siRNA (h): sc-88574, ASH1L siRNA (m): sc-105100, ASH1L shRNA Plasmid (h): sc-88574-SH, ASH1L shRNA Plasmid (m): sc-105100-SH, ASH1L shRNA (h) Lentiviral Particles: sc-88574-V and ASH1L shRNA (m) Lentiviral Particles: sc-105100-V.

ASH1L (H-228) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ASH1L: 332 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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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Try **ASH1L (ASH5H03): sc-81052**, our highly recommended monoclonal alternative to ASH1L (H-228).