

ASH1L (N-17): sc-104089

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.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 607999. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Vakoc, C.R., Sachdeva, M.M., Wang, H. and Blobel, G.A. 2006. Profile of histone lysine methylation across transcribed mammalian chromatin. Mol. Cell. Biol. 26: 9185-9195.
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 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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-104089 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-104089 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ASH1L (N-17) 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), 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); non cross-reactive with family members ASH1 or ASH2L.

ASH1L (N-17) is also recommended for detection of ASH1L in additional species, including equine, canine, bovine and avian.

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 (N-17) 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 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) 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.

STORAGE

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

PROTOCOLS

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


 MONOS
 Satisfaction
 Guaranteed

Try **ASH1L (ASH5H03): sc-81052**, our highly recommended monoclonal alternative to ASH1L (N-17).