



ASH2L (m): 293T Lysate: sc-118586

BACKGROUND

The human ASH2L gene encodes a 628 amino acid protein known as ASH2L1, or isoform 1, which contains a nuclear localization signal and PHD finger motif, suggesting that the gene product functions as a transcription regulator. Alternative splicing results in a shorter isoform 2, designated ASH2L2, which is missing the first 94 amino acid residues found in ASH2L1. Human ASH2L proteins are 60% homologous to *Drosophila* ash2, which positively regulates expression of certain genes in early development and contain similar, but not identical, domains, including a zinc finger motif. ASH2L is highly expressed in fetal liver, testis and leukemia cell lines with erythroid and megakaryocytic potential, such as K-562, Hel and Dami. Differentiation inducers (e.g. phorbol ester and hemin) cause different expression patterns in these cells lines, suggesting that ASH2L plays a role in hematopoiesis and is associated with particular types of leukemia.

REFERENCES

1. Ikegawa, S., et al. 1999. Cloning and characterization of ASH2L and Ash2l, human and mouse homologs of the *Drosophila* ASH2 gene. *Cytogenet. Cell Genet.* 84: 167-172.
2. Wang, J., et al. 2001. ASH2L: alternative splicing and downregulation during induced megakaryocytic differentiation of multipotential leukemia cell lines. *J. Mol. Med.* 79: 399-405.
3. Amoros, M., et al. 2002. The ash2 gene is involved in *Drosophila* wing development. *Int. J. Dev. Biol.* 46: 321-324.
4. Wysocka, J., et al. 2003. Human Sin3 deacetylase and trithorax-related Set1/Ash2 histone H3-K4 methyltransferase are tethered together selectively by the cell-proliferation factor HCF-1. *Genes Dev.* 17: 896-911.
5. Beltran, S., et al. 2003. Transcriptional network controlled by the trithorax-group gene ash2 in *Drosophila melanogaster*. *Proc. Natl. Acad. Sci. USA* 100: 3293-3298.
6. Angulo, M., et al. 2004. Activation and repression activities of ash2 in *Drosophila* wing imaginal discs. *Development* 131: 4943-4953.

CHROMOSOMAL LOCATION

Genetic locus: Ash2l (mouse) mapping to 8 A2.

PRODUCT

ASH2L (m): 293T Lysate represents a lysate of mouse ASH2L transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ASH2L (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ASH2L antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.