

Active Recombinant Human ASH2L Protein, SUMO-tagged

Cat. No. ASH2L-009H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ASH2L protein (96-628) with a SUMO-tag was expressed in E. coli
Species	Human
Source	E.coli
ProteinLength	96-628
Description	This gene is the human homolog of the Drosophila absent, small or homeotic discs 2 (ash2) gene product, a member of the trithorax group (TrxG) of proteins. The TrxG gene products in Drosophila and their mammalian homologs are responsible for controlling gene transcription. The ASH2L protein is a component of various multisubunit protein complexes, including the large complex of proteins associated with the SET1 (MLL) family of lysine methyltransferases. ASH2L, along with WDR5 and RbBP5, form the human MLL1 core protein complex. MLL1-5 protein complexes catalyze the di- and trimethylation of histone H3 at lysine 4 (H3K4me2/me3), leading to the maintenance of global H3K4 trimethylation. Post-translational modifications of ASH2L have also been described showing methylation of Arg-296 by protein-arginine methyltransferase 1 (PRMT1) in vitro and in cells and by PRMT5 in vitro. Further experimental evidence in rats suggests that ASH2L cooperates with Ha-RAS to transform rat embryonic fibroblasts, implicating ASH2L as a novel oncoprotein.
Bio-activity	Activity was demonstrated by a radiometric assay of the MLL1 complex (ASH2L,

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WDR5, RbBP5, and MLL1) and MLL1 complex (ASH2L, WDR5, RbBP5, MLL1, 3 and DPY30) using [3 H]-S-adenosylmethionine and Core Histones which specifically methylates Histone H3.

Molecular Mass	60.1 kDa
Purity	≥90% estimated by SDS-PAGE
Stability	≥ 6 months
Storage	-80 centigrade
Storage Buffer	50 mM Tris, pH 8.0, containing 150 mM sodium chloride and 20% glycerol
Shipping	Dry ice in continental US, may vary elsewhere.

GENE INFORMATION

Gene Name	ASH2L ASH2 like, histone lysine methyltransferase complex subunit [Homo sapiens (human)]
Official Symbol	ASH2L
Synonyms	ASH2L; ASH2 like, histone lysine methyltransferase complex subunit; ASH2; Bre2; ASH2L1; ASH2L2; set1/Ash2 histone methyltransferase complex subunit ASH2; ASH2-like protein; ash2 (absent, small, or homeotic)-like
Gene ID	9070
mRNA Refseq	NM_004674

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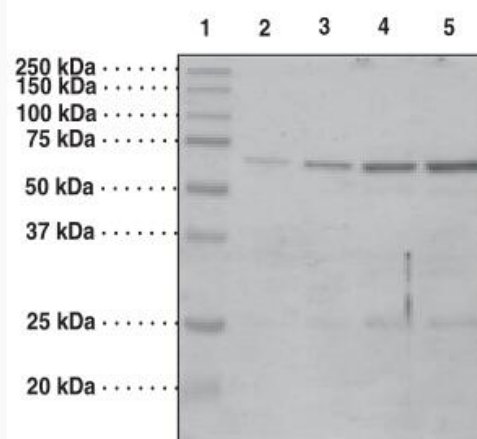
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Protein Refseq NP_004665

MIM 604782

UniProt ID Q9UBL3

SDS-PAGE analysis
of ASH2L.



Lane 1: MW Ladders

Lane 2: ASH2L (1 g)

Lane 3: ASH2L (2 g)

Lane 4: ASH2L (4 g)

Lane 5: ASH2L (6 g)

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