

#5019 Store at -20°C

ASH2L (D93F6) XP[®] Rabbit mAb



✓ 100 µl
(20 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IF-IC Endogenous	H, M, R, Mk, (Dm)	80, 65 kDa	Rabbit IgG**

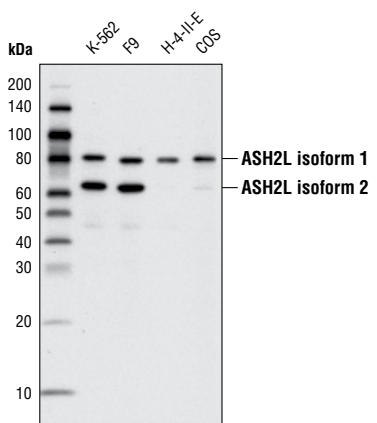
Background: The Set1 histone methyltransferase protein was first identified in yeast as part of the Set1/COMPASS histone methyltransferase complex, which methylates histone H3 on Lys4 and functions as a transcriptional co-activator (1). While yeast contain only one known Set1 protein, mammals contain six Set1-related proteins: SET1A, SET1B, MLL1, MLL2, MLL3 and MLL4, all of which assemble into COMPASS-like complexes and methylate histone H3 on Lys4 (2,3). These Set1-related proteins are each found in distinct protein complexes, all of which share the common subunits WDR5, RBBP5, ASH2L, CXXC1 and DPY30, which are required for proper complex assembly and modulation of histone methyltransferase activity (2-6). MLL1 and MLL2 complexes contain the additional protein subunit, Menin (6). Like yeast Set1, all six Set1-related mammalian proteins methylate histone H3 on Lys4 (2-6). MLL translocations are found in a large number of hematological malignancies, suggesting that Set1/COMPASS histone methyltransferase complexes play a critical role in leukemogenesis (6).

Specificity/Sensitivity: ASH2L (D93F6) XP[®] Rabbit mAb detects endogenous levels of all known isoforms of the ASH2L protein.

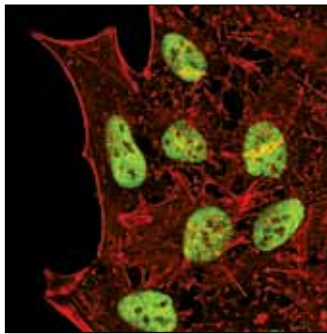
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human ASH2L protein.

Background References:

- (1) Miller, T. et al. (2001) *Proc Natl Acad Sci USA* 98, 12902-7.
- (2) Shilatifard, A. (2008) *Curr Opin Cell Biol* 20, 341-8.
- (3) Tenney, K. and Shilatifard, A. (2005) *J Cell Biochem* 95, 429-36.
- (4) Lee, J.H. and Skalnik, D.G. (2005) *J Biol Chem* 280, 41725-31.
- (5) Lee, J.H. et al. (2007) *J Biol Chem* 282, 13419-28.
- (6) Hughes, C.M. et al. (2004) *Mol Cell* 13, 587-97.



Western blot analysis of extracts from various cell lines using ASH2L (D93F6) XP[®] Rabbit mAb.



Confocal immunofluorescent analysis of HeLa cells using ASH2L (D93F6) XP[®] Rabbit mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red).

Entrez-Gene ID #9070
Swiss-Prot Acc. #Q9UBL3

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:2000
Immunoprecipitation	1:100
Immunofluorescence (IF-IC)	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.