SUV39H1 (D11B6) Rabbit mAb

Background: Human histone methyltransferase SUV39H1 is the homolog of the dominant Drosophila PEV modifier Su(var)3-9 and is composed of 412 amino acid residues (1). It combines two of the most evolutionarily conserved domains of the “chromatin regulators”: the chromo and SET domains (2,3). The 60 amino acid chromo domain represents an ancient histone-like fold that directs heterochromatic localizations. It has been demonstrated that the 130 amino acid SET domain contains the methyltransferase catalytic motif, which cooperates with the adjacent cysteine-rich regions to confer histone methyltransferase activity (1). This enzyme selectively methylates histone H3 on Lys9, which generates a binding site for HP1 proteins, a family of heterochromatic adaptor molecules involved in both gene silencing and supra-nucleosomal chromatin structure (4,5).

SUV39H1 histone methyltransferase plays an important role in modification of histone amino termini and regulation of gene expression.

Specificity/Sensitivity: SUV39H1 (D11B6) Rabbit mAb recognizes endogenous levels of total SUV39H1 protein. This antibody does not cross-react with the SUV39H2 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp380 of human SUV39H1 protein.

Background References:

Recommended Antibody Dilutions:
Western blotting 1:1000
Immunoprecipitation 1:50

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.