

Recombinant SUV39H2 (26-350) protein

Catalog No: 31359**Lot No:** 05016001**Expressed In:** *E. coli***Quantity:** 50 µg**Concentration:** 0.25 µg/µl**Source:** Human

Buffer Contents: Recombinant SUV39H2 (26-350) expressed in *E. coli* and supplied in a buffer of 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 3 mM DTT, 20% glycerol.

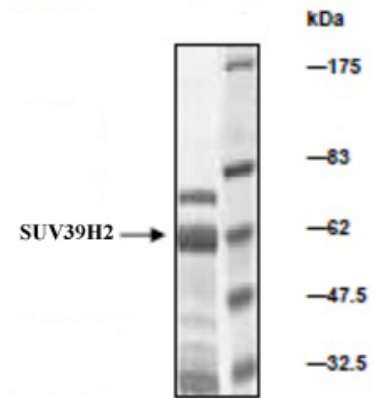
Background: SUV39H2 (Suppressor Of Variegation 3-9 Homolog 2 (Drosophila)) is a Histone methyltransferase that specifically trimethylates Lys-9 of histone H3 using monomethylated H3 Lys-9 as substrate. H3 Lys-9 trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Mainly functions in heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin at pericentric and telomere regions. H3 Lys-9 trimethylation is also required to direct DNA methylation at pericentric repeats. SUV39H1 is targeted to histone H3 via its interaction with RB1 and is involved in many processes, such as cell cycle regulation, transcriptional repression and regulation of telomere length. May participate in regulation of higher-order chromatin organization during spermatogenesis. Recruited by the large PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1, contributes to the conversion of local chromatin to a heterochromatin-like repressive state through H3 Lys-9 trimethylation.

Protein Details: Amino acids 26-350 of SUV39H2 (accession number NP_078946.1) were expressed in *E. coli* with an N-terminal GST-Tag and an observed molecular weight of 63 kDa.

Application Notes: Recombinant SUV39H2 (26-350) is suitable for use in histone methyltransferase (HMT) assays. A good starting point is 10 to 50 ng of enzyme per assay.

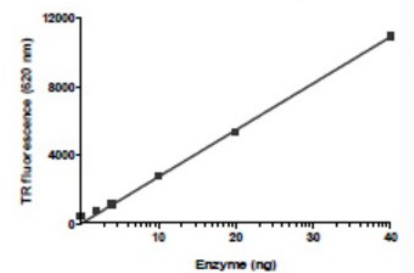
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant SUV39H2 (26-350) protein gel.

SUV39H2 protein was run on an SDS-PAGE gel and stained with Coomassie blue.



SUV39H2 (26-350) activity assay.

Recombinant SUV39H2 (26-350) activity measured using a chemiluminescent methyltransferase assay.