

SUV39H2 recombinant protein

Recombinant SUV39H2 protein

CATALOG #
AAA60104

HOST
E Coli

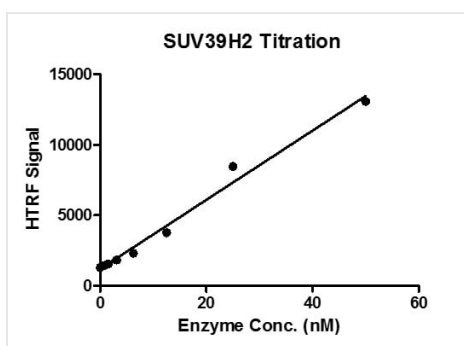
PRODUCT SYNONYMS

SUV39H2; Recombinant SUV39H2 protein; KMT1B; SUV39H2 recombinant protein

PRODUCT SPECIFICATIONS

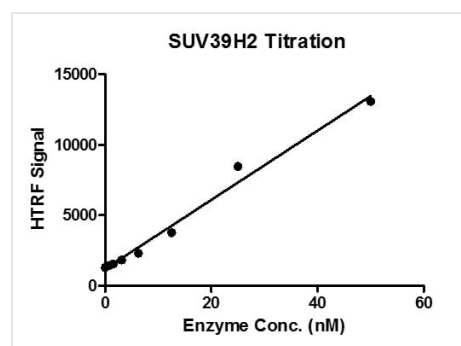
Host	E Coli
Form/Format	Recombinant SUV39H2 protein is supplied at a concentration of 0.5ug/ul in 25mM Tris pH8.0, 300mM NaCl, 5% glycerol.
Protein Species	Human
Tag	GST-Tag
Notes	Recombinant SUV39H2 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. HMT Assay Conditions: 3uM H3K9me1 (1-21 aa) peptide was incubated with different concentrations of SUV39H1 (82-412) protein in a 10ul reaction system containing 50mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2mM MgCl2, 1mM TCEP and 50uM SAM for 1 hour, then 10ul H3K9me2 antibody and SA-XL665 mixture (each 1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



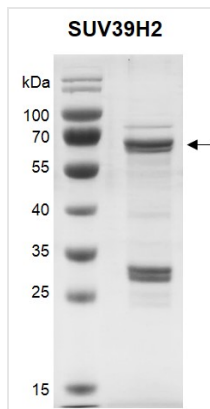
Application Data

HTRF assay for SUV39H2 activity 3 uM H3 (1-21) peptide was incubated with SUV39H2 in reaction buffer for 3 hours at room temperature. Anti-H3K9me2 antibody was used to detect reaction products.



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SDS-PAGE

Recombinant SUV39H2 protein 10% SDS-PAGE Coomassie staining MW: 66.8 kDa Purity: > 55%

ADDITIONAL INFORMATION

Related Product Information for SUV39H2 recombinant protein

Short Description: Recombinant SUV39H2 was expressed in E Coli as the full-length protein (accession number NP_078946.1) with an N-terminal GST-Tag. The molecular weight of SUV39H2 is 66.8 kDa. It is suitable for use in histone methyltransferase (HMT) assays.

Background: SUV39H2 (Suppressor Of Variegation 3-9 Homolog 2, also known as KMT1B) is a histone methyltransferase that specifically trimethylates Lys-9 of histone H3. SUV39H2 prefers H3K9me0 as a substrate over H3K9me1 and H3K9me2. SUV39H2 can transfer up to three methyl groups to lysine 9 of histone H3 but the last methylation reaction is much slower than the first two steps. SUV39H1 and SUV39H2 can regulate the telomere length in mammalian cell. SuUV39H2 transcripts remain specifically expressed in adult testes. Histone H3 Lys-9 trimethylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. H3K9me3 plays an important role in the establishment of constitutive heterochromatin at pericentric and telomere regions. H3K9me3 is also required to direct DNA methylation at pericentric repeats.

Product Categories/Family for SUV39H2 recombinant protein

Recombinant Proteins; Histone Methyltransferase (HMT)

NCBI AND UNIPROT INFORMATION

NCBI GI #	13375930
NCBI GeneID	79723
NCBI Accession #	NP_078946.1
NCBI GenBank Nucleotide #	NM_024670.3
Molecular Weight	26,350 Da
NCBI Official Full Name	histone-lysine N-methyltransferase SUV39H2 isoform 2
NCBI Official Synonym Full Names	suppressor of variegation 3-9 homolog 2
NCBI Official Symbol	SUV39H2
NCBI Official Synonym Symbols	KMT1B
NCBI Protein Information	histone-lysine N-methyltransferase SUV39H2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.