

SUV39H1 recombinant protein

Recombinant SUV39H1 (82-412) protein

CATALOG #
AAA60109

HOST
E Coli

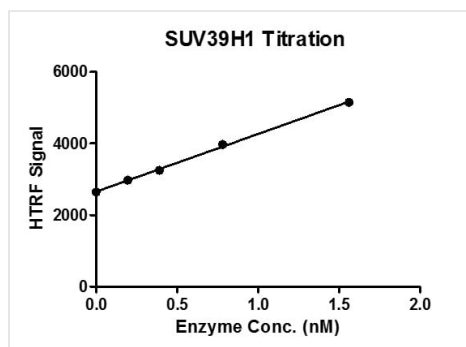
PRODUCT SYNONYMS

SUV39H1; Recombinant SUV39H1 (82-412) protein; MG44; KMT1A; SUV39H; H3-K9-HMTase 1; SUV39H1 recombinant protein

PRODUCT SPECIFICATIONS

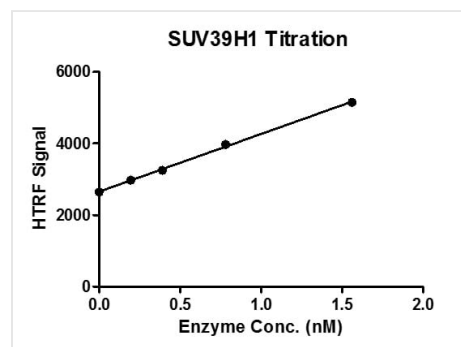
Host	E Coli
Form/Format	Recombinant SUV39H1 (82-412) protein is supplied in 25mM Tris pH8.0, 300mM NaCl, 10% glycerol, and 0.5mM TCEP.
Protein Species	Human
Tag	GST-Tag
Notes	Recombinant SUV39H1 (82-412) is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.
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



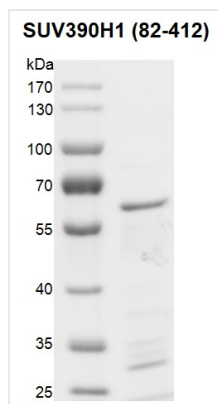
Application Data

HTRF assay for SUV39H1 (82-412) activity 3 uM H3K9me1 (1-21 aa) peptide was incubated with different concentrations of SUV39H1 (82-412) protein in a 10 ul reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP and 50 uM SAM for 1 hour, then 10 ul 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.



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SDS-PAGE

Recombinant SUV39H1 (82-412) protein 10% SDS-PAGE Coomassie staining MW: 64.6 kDa
Purity: > 78%

ADDITIONAL INFORMATION

Related Product Information for SUV39H1 recombinant protein

Short Description: Recombinant SUV39H1 (82-412) protein corresponding to amino acids 82-412 of SUV39H1 protein (accession number NP_003164.1) was expressed in E Coli and contains an N-terminal GST-Tag with a molecular weight of 64.6 kDa. Recombinant SUV39H1 (82-412) protein contains the SET domain of SUV39H1 that is responsible for methyltransferase activity. It is suitable for use in histone methyltransferase assays as well as in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Background: SUV39H1 (Suppressor Of Variegation 3-9 Homolog 1, also known as KMT1A) is a histone methyltransferase that specifically trimethylates Lys-9 of histone H3, which results in transcriptional gene silencing. SUV39H1 is targeted to histone H3 via its interaction with RB1 and is involved in many processes, such as repression of MYOD1-stimulated differentiation, regulation of the control switch for exiting the cell cycle and entering differentiation, repression by the PML-RARA fusion protein, BMP-induced repression, repression of switch recombination to IgA and regulation of telomere length. SUV39H1 and SUV39H2 can regulate the telomere length in mammalian cell. 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 SUV39H1 recombinant protein

[Recombinant Proteins](#); [Histone Methyltransferase \(HMT\)](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507321
NCBI GeneID	6839
NCBI Accession #	NP_003164.1
NCBI GenBank Nucleotide #	NM_003173.3
UniProt Accession #	O43463 ; Q53G60 ; Q6FHK6 ; B2R6E8
Molecular Weight	412
NCBI Official Full Name	histone-lysine N-methyltransferase SUV39H1 isoform 2
NCBI Official Synonym Full Names	suppressor of variegation 3-9 homolog 1 (Drosophila)
NCBI Official Symbol	SUV39H1
NCBI Official Synonym Symbols	MG44; KMT1A; SUV39H; H3-K9-HMTase 1
NCBI Protein Information	histone-lysine N-methyltransferase SUV39H1; Su(var)3-9 homolog 1; lysine N-methyltransferase 1A; histone H3-K9 methyltransferase 1; position-effect variegation 3-9 homolog; histone-lysine N-methyltransferase, H3 lysine-9 specific 1

UniProt Protein Name	Histone-lysine N-methyltransferase SUV39H1
UniProt Gene Name	SUV39H1
UniProt Synonym Gene Names	KMT1A; SUV39H; H3-K9-HMTase 1
UniProt Entry Name	SUV91_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/suv39h1-recombinant-protein-e-coli/60109>