

Recombinant SUV420H2 protein

Catalog No: 81013, 81713

Lot No: 11017001

Expressed In: *E. coli*

Quantity: 20, 1000 µg

Concentration: 0.3 µg/µl

Source: Human

Buffer Contents: Recombinant SUV420H2 protein is supplied at a concentration of 0.3 µg/µl in 25 mM Tris pH 8.0, 300 mM NaCl, 5% glycerol.

Background: SUV420H2 (Suppressor Of Variegation 4-20 Homolog 2, also known as KMT5C) is a histone methyltransferase that specifically trimethylates nucleosomal histone H4 on lysine 20 (H4K20). H4K20me3 is a histone marker that represents epigenetic transcriptional repression. SUV420H2 mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. SUV420H2 is targeted to histone H3 via its interaction with RB1 family proteins.

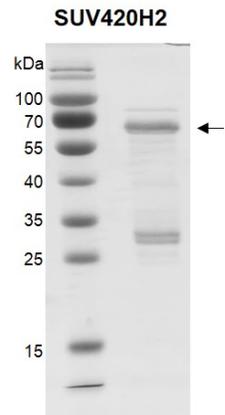
Protein Details: Recombinant SUV420H2 protein was expressed in *E. coli* cells as full length protein (accession number NP_116090.2) and contains an N-terminal GST tag with an observed molecular weight of 78.4 kDa.

Application Notes: Recombinant SUV420H2 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Specific Activity: H4K20 methyltransferase activity.

HMT Assay Conditions: 2 µg Recombinant Nucleosomes (H3.1) (Cat. 31466) were incubated with 0 µg (-), 0.1 µg (+), 0.2 µg (++) , 0.4 µg (+++) SUV420H2 protein, in 30 µl reaction containing 50 mM Tris-HCl, pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP, 50 µM SAM for 3 hr at RT. Products run on a 12.5% SDS-PAGE gel were detected with anti-H4K20me2 (Cat. 39540) or anti-H4K20me3 (Cat. 39672). SUV420H2 only was used as negative control.

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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

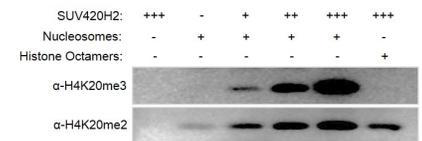


Recombinant SUV420H2 protein

10% SDS-PAGE Coomassie staining

MW: 78.4 kDa

Purity: > 60%



Recombinant SUV420H2 activity assay

Recombinant Nucleosomes (H3.1) in various amounts were incubated with SUV420H2 protein. Reaction products were run on SDS-PAGE gel and detected with anti-H4K20me2 or anti-H4K20me3. The activity of SUV420H2 with nucleosomes as substrate is better than with histone octamers as substrate.