

## SUV420H2 recombinant protein

Recombinant SUV420H2 (2-281) protein

|                              |                       |
|------------------------------|-----------------------|
| CATALOG #<br><b>AAA60106</b> | HOST<br><b>E Coli</b> |
|------------------------------|-----------------------|

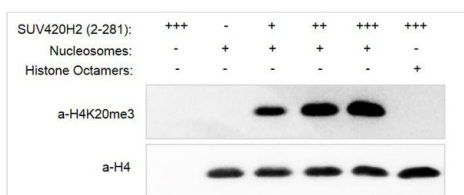
### PRODUCT SYNONYMS

SUV420H2; Recombinant SUV420H2 (2-281) protein; KMT5C; SUV420H2 recombinant protein

### PRODUCT SPECIFICATIONS

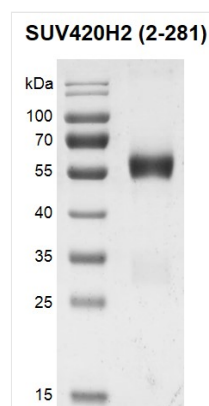
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|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E Coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Form/Format             | Recombinant SUV420H2 (2-281) protein is supplied at a concentration of 1ug/ul in 25mM Tris pH8.0, 300mM NaCl, 5% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein Species         | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Tag                     | GST-Tag                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Notes                   | Recombinant SUV420H2 (2-281) is suitable for use in the study of enzyme kinetics, inhibitor screening and selectivity profiling. HMT Assay Conditions: Recombinant SUV420H2 (2-281) activity assay 2ug Recombinant Nucleosomes (H3.1) were incubated with 0ug (-), 0.2ug (+), 0.4ug (++), 0.8ug (+++) SUV420H2 (2-281) protein, respectively, in 30ul reaction system containing 50mM Tris-HCl, pH 8.6, 0.02% Triton X-100, 2mM MgCl <sub>2</sub> , 1mM TCEP, 50uM SAM for 3 hr at room temperature. 6ul reaction products were loaded and run on a 12.5% SDS-PAGE gel. Western Blot was used to detect the generation of reaction products (Anti-H4K20me3, 1:1000 dilution). SUV420H2 (2-281) only was used as negative control. H4 was used as loading control. |
| 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.<br>Shipping Temp: Dry Ice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

### IMAGES



#### WB (Western Blot)

Recombinant SUV420H2 (2-281) activity assay Recombinant Nucleosomes (H3.1) were incubated with SUV420H2 (2-281) protein. Reaction products were run on SDS-PAGE, and detected by Western Blot using Anti-H4K20me3. Results show the activity of SUV420H2 (2-281) with nucleosomes as substrate is better than with histone octamers.



#### SDS-PAGE

Recombinant SUV420H2 (2-281) protein 10% SDS-PAGE Coomassie staining MW: 58.1 kDa Purity: > 90%

ADDITIONAL INFORMATION

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for SUV420H2 recombinant protein | <p>Short Description: Recombinant SUV420H2 (2-281) protein corresponding to amino acids 2-281 of SUV420H2 protein (accession number NP_116090.2) was expressed in E Coli and contains an N-terminal GST-Tag with a molecular weight of 58.1 kDa. Recombinant SUV420H2 (2-281) protein contains the SET domain of SUV420H2 that is responsible for methyltransferase activity. It is suitable for use in histone methyltransferase (HMT) assays.</p> <p>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.</p> |
| Product Categories/Family for SUV420H2 recombinant protein   | Recombinant Proteins; Histone Methyltransferase (HMT)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                              |
|----------------------------------|--------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 31543169                                                                                                     |
| NCBI GeneID                      | 84787                                                                                                        |
| NCBI Accession #                 | NP_116090.2                                                                                                  |
| NCBI GenBank Nucleotide #        | NM_032701.3                                                                                                  |
| UniProt Accession #              | Q86Y97; Q8WZ10; Q9BRZ6                                                                                       |
| Molecular Weight                 | 52,113 Da                                                                                                    |
| NCBI Official Full Name          | histone-lysine N-methyltransferase SUV420H2                                                                  |
| NCBI Official Synonym Full Names | suppressor of variegation 4-20 homolog 2 (Drosophila)                                                        |
| NCBI Official Symbol             | SUV420H2                                                                                                     |
| NCBI Official Synonym Symbols    | KMT5C                                                                                                        |
| NCBI Protein Information         | histone-lysine N-methyltransferase SUV420H2; suv4-20h2; su(var)4-20 homolog 2; lysine N-methyltransferase 5C |
| UniProt Protein Name             | Histone-lysine N-methyltransferase SUV420H2                                                                  |
| UniProt Gene Name                | SUV420H2                                                                                                     |
| UniProt Synonym Gene Names       | KMT5C                                                                                                        |
| UniProt Entry Name               | SV422_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.