

## Product datasheet

# Recombinant human KMT1B / SUV39H2 protein ab80288

[2 Images](#)

### Description

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|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Recombinant human KMT1B / SUV39H2 protein |
| <b>Biological activity</b> | Specific Activity: 38 pmol/min/mg.        |
| <b>Purity</b>              | > 70 % SDS-PAGE.                          |
| <b>Expression system</b>   | Escherichia coli                          |
| <b>Accession</b>           | <u><a href="#">Q9H5I1</a></u>             |
| <b>Protein length</b>      | Protein fragment                          |
| <b>Animal free</b>         | No  |
| <b>Nature</b>              | Recombinant                               |
| <b>Species</b>             | Human                                     |
| <b>Amino acids</b>         | 26 to 350                                 |

### Specifications

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Our **Abpromise guarantee** covers the use of **ab80288** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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|---------------------|--------------------------------|
| <b>Applications</b> | Functional Studies<br>SDS-PAGE |
| <b>Form</b>         | Liquid                         |

### Preparation and Storage

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|------------------------------|---|
| <b>Stability and Storage</b> | Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.<br>pH: 8.00<br>Constituents: 0.0462% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 0.05% Tween,<br>30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride<br><br>This product is an active protein and may elicit a biological response in vivo, handle with caution. |
|------------------------------|---|

## General Info

### Function

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.

### Sequence similarities

Belongs to the histone-lysine methyltransferase family. Suvar3-9 subfamily.  
Contains 1 chromo domain.  
Contains 1 post-SET domain.  
Contains 1 pre-SET domain.  
Contains 1 SET domain.

### Domain

Although the SET domain contains the active site of enzymatic activity, both pre-SET and post-SET domains are required for methyltransferase activity. The SET domain also participates to stable binding to heterochromatin.

### Cellular localization

Nucleus. Chromosome > centromere. Associates with centromeric constitutive heterochromatin.

## Images

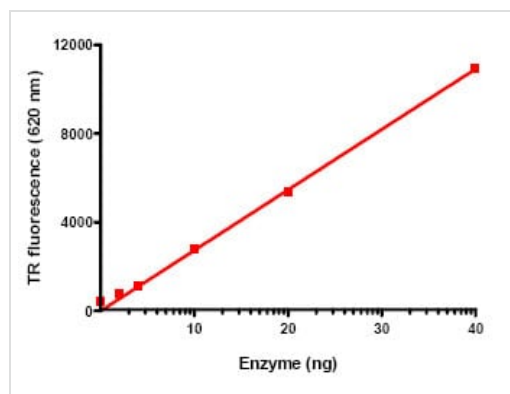
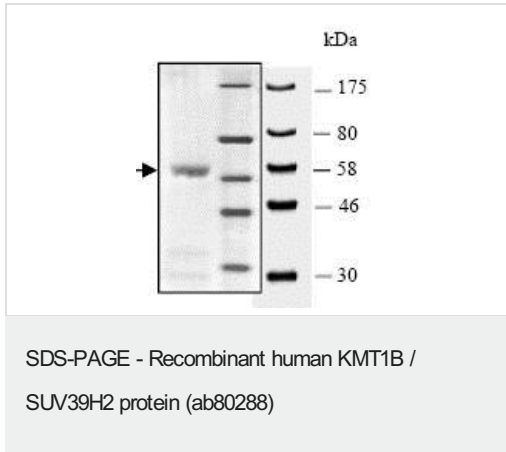


Image showing specific activity of ab80288.

Functional Studies - Recombinant human KMT1B / SUV39H2 protein (ab80288)



10% SDS-PAGE showing ab80288 at approximately 63kDa (3µg).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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