

## Certificate of Analysis

### PRMT3

#### Human histone Lysine N-methyltransferase PRMT3, active

(Recombinant enzyme expressed in *E.coli*)

Item # EPI054

Lot # 139692

**Product Description:** N-terminal, 6His-tagged recombinant human PRMT3, amino acids 211-531, expressed in *E.coli*. Purified using immobilised metal affinity chromatography.  
MW = 38.2kDa.

**Formulation:** 1mg/ml of enzyme in 5mM Tris/HCl pH7.4, 250mM NaCl, 1.5mM DTT, 50% glycerol. Frozen solution.

**Storage and Stability:** Stable for 1 year at -70°C from date of shipment. For maximum recovery of product, centrifuge original vial prior to removing the cap.

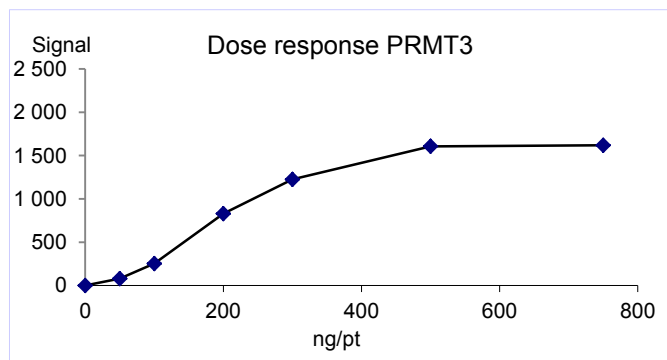
**Aliases :** HRMT1L3

**Handling Recommendations:** Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled microcentrifuge tubes and store at -70°C.

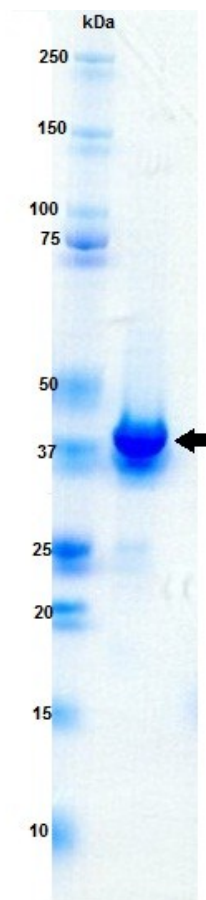
**FOR IN VITRO RESEARCH USE ONLY  
NOT FOR USE IN HUMANS OR ANIMALS**

### Quality Control Testing

**HMT Assay:** 50-750ng of this lot of enzyme transferred methyl groups from [3H] SAM to Histone H4 in the assay described on page two. Assay background was subtracted from the actual counts to yield the results shown below.



**MS:** Size was confirmed by mass spectrometry using a Q-TOF.



**SDS-PAGE and Coomassie Stain:** Purity was assessed by SDS-PAGE and Coomassie blue staining using 4µg of PRMT3.

## Certificate of Analysis

### PRMT3 Assay Protocol

#### Stock Solutions:

1. **Reaction buffer:** 50mM Tris/HCl pH9.0, 5mM MgCl<sub>2</sub>, 50mM NaCl, 4mM DTT.
2. **PRMT3, active:** Dilute with reaction buffer. Use 50-750ng per assay point.
3. **Histone H4:** Dilute with reaction buffer to 1250nM.
4. **[3H] SAM:** Dilute with a SAM solution (630nM) in reaction buffer to 70nM.
5. **Filtration Buffer :** 33mM Citric acid pH2.2

#### Assay Procedure (96 well plate format):

1. Add 5µl of 10% DMSO per assay to each well.
2. Add 25µl of [3H] SAM.
3. Add 10µl (**50-750ng**) **PRMT3, active**.
4. Add 10µl of Histone H4.
5. Incubate for 120 minutes at 22°C.
6. Stop the reaction by adding 500µl of citric acid, then filter on a GF/B Filter. Wash 3 times with Filtration buffer.
7. Dry and add scintillation cocktail.
8. Read in a scintillation counter. Compare the signal of enzyme samples with that of a background sample that contains all assay components except the enzyme PRMT3.

# Certificate of Analysis

## PRMT3 Sequence Information

<b><u>Protein</u></b>	Human PRMT3
<b><u>Tags</u></b>	N-Terminal 6His
<b><u>Accession number</u></b>	GenBank NP_005779.1

### ***Recombinant PRMT3 amino acid sequence:***

```
1 MGSSHHHHHH SSSLVPRGSD LQEDEDGVYF SSYGHYGIHE EMLKDKIRTE
51 SYRDFIYQNP HIFKDKVLD VCGGTGILSM FAAKAGAKKV LGVDQSEILY
101 QAMDIIRLNK LEDTITLIKG KIEEVHLPVE KVDVIISEWM GYLLFESML
151 DSVLYAKNKY LAKGGSVYPD ICTISLVAVS DVNKHADRIA FWDDVYGFKM
201 SCMKKAVIPE AWEVLDPKT LISEPCGIKH IDCHTTSISD LEFSSDFTLK
251 ITRTSMCTAI AGYFDIYFEK NCHNRVVFST GPQSTKTHWK QTVFLLEKPF
301 SVKAGEALKG KVTVHKNNKD PRSLTVTLTL NNSTQTYGLQ
```

Reviewed and approved by site quality representative.

Unless otherwise stated in our catalogue or other company documentation accompanying the product(s), our products are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals.

© 2014 Eurofins Pharma Discovery Services UK Limited is an independent member of Eurofins Discovery Services.