

Certificate of Analysis

SUV39H2

Human Suppressor of variegation 3-9 homolog 2, methyltransferase domain
(Recombinant enzyme expressed in *E.coli*)

Item # EPI065

Lot # 142840

Product Description: recombinant human SUV39H2, amino acids 114-410, expressed in *E.coli*. Purified using immobilised metal affinity chromatography.
MW = 34kDa.

Formulation: 1mg/ml of enzyme in 5mM Tris/HCl pH7.5, 250mM NaCl, 50% Glycérol. 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.

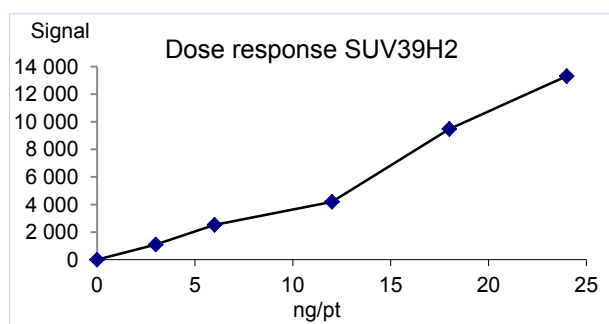
Tag cleaved by Thrombin.

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.

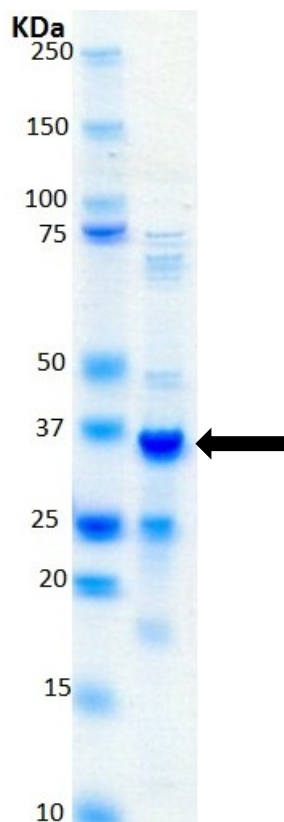
FOR IN VITRO RESEARCH USE ONLY
NOT FOR USE IN HUMANS OR ANIMALS

Quality Control Testing

HMT Assay: 3-24ng of this lot of enzyme transferred methyl groups from [3H] SAM to histone H3 full length 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 SUV39H2.

Certificate of Analysis

SUV39H2 Assay Protocol

Stock Solutions:

1. **Reaction buffer:** 50mM Tris/HCl pH9, 5mM MgCl₂, 50mM NaCl, 4mM DTT.
2. **SUV39H2:** Dilute with reaction buffer. Use 3-24ng per assay point.
3. **Histone H3 full length:** Dilute with reaction buffer to 2.5µg/ml.
4. **[3H] SAM:** Dilute with SAM solution (630nM) 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 wells.
2. Add 25µl of [3H] SAM.
3. Add 10µl **(3-24ng) SUV39H2**.
4. Add 10µl of Histone H3 full length.
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 SUV39H2.

SUV39H2 Sequence Information

Protein Human SUV39H2
Tags Tag cleaved by Thrombin
Accession number NP_001180353.1

Recombinant SUV39H2 amino acid sequence:

1 GSPKDNNKTL KPAIAEYIVK KAKQRIALQR WQDELNRRKN HKGMIFVENT
51 VDLEGPPSDF YYINEYKPAP GISLVNEATF GCSCTDCFFQ KCCPAEAGVL
101 LAYNKNQQIK IPPGTPIYEC NSRCQCGPDC PNRIVQKGTQ YSLCIFRTSN
151 GRGWGVKTLV KIKRMSFVME YVGEVITSEE AERRGQFYDN KGITYLFDLD
201 YESDEFTVDA ARYGNVSHFV NHSCDPNLQV FNVFIDNLDL RLPRIALFST
251 RTINAGEELT FDYQMKGSGD ISSDSIDHSP AKKRVRTVCK CGAVTCRGYL
301 N

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.