

Certificate of Analysis

SUV4-20H2

Human Suppressor of variegation 4-20 homolog 2, methyltransferase domain, active

(Recombinant enzyme expressed in *E.coli*)

Item # EPI067

Lot # 139687

Product Description: recombinant human SUV4-20H2, amino acids 2-248, expressed in *E.coli*. Purified using immobilised metal affinity chromatography. MW = 28.1kDa.

Tag cleaved by TEV.

Formulation: 1mg/ml of enzyme in 5mM Tris/HCl pH7.5, 250mM NaCl, 1.1mM DTT, 50% Glycérol. Frozen solution.

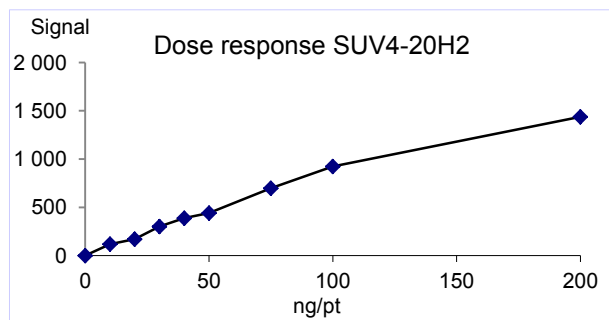
Storage and Stability: Stable for 1 year at -70°C from date of shipment. For maximum recovery of product, centrifuge original vial prior to removing the cap.

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.

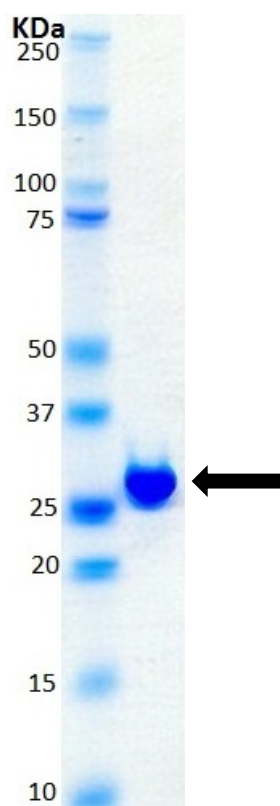
**FOR IN VITRO RESEARCH USE ONLY
NOT FOR USE IN HUMANS OR ANIMALS**

Quality Control Testing

HMT Assay: 10-200ng of this lot of enzyme transfer methyl groups from [3H] SAM to nucleosome 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 SUV4-20H2.

Certificate of Analysis

SUV4-20H2 Assay Protocol

Stock Solutions:

1. **Reaction buffer:** 50mM Tris/HCl pH7.4, 5mM DTT, 0.01% Triton.
2. **SUV4-20H2, active:** Dilute with reaction buffer. Use 10-200ng per assay point.
3. **Nucleosome:** Dilute with reaction buffer to 7.5µg/ml.
4. **[3H] SAM:** Dilute with reaction buffer to 150nM.
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 (**10-200ng**) **SUV4-20H2, active**.
4. Add 10µl of Nucleosome.
5. Incubate for 15 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 SUV4-20H2.

SUV4-20H2 Sequence Information

Protein Human SUV4-20H2
Tags Tag cleaved by TEV
Accession number NP_116090.2

Recombinant SUV4-20H2 amino acid sequence:

1 GGPDRV TARE LCENDDLATS LVLDPYLGFR THKMNVSPVP PLRRQQHLRS
51 ALETFLRQRD LEAAYRALTL GGWTARYFQS RGPRQEAALK THVYRYLRAF
101 LPESGFTILP CTRYSMETNG AKIVSTRAWK KNEKLELLVG CIAELREADE
151 GLLRAGENDF SIMYSTRKRS AQLWLGPAAF INHDCKPNCK FVPADGNAAC
201 VKVLRDIEPG DEVTCFYGEG FFGEKNEHCE CHTCERKGEG AFRTRPRE

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.