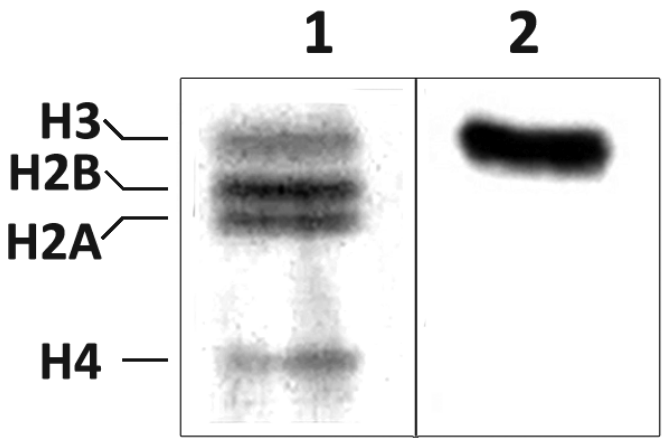
G9a, human

Catalog No. 15-1008
Lot No. 13141001
Pack Size 50 µg

Type	HMT	**Expressed In**	*E. coli*
Mol. Wgt.	65 kDa	**Epitope Tag**	GST

Product Description:

Recombinant human G9a protein, (EHMT2 BAT8, KMT1C, accession Q96KQ7, amino acids 913-1210), containing an N-terminal GST tag, expressed in *E. coli.* G9a is a SET-domain containing histone methyltransferase, catalyzing the mono- and di-methylation of histone H3 at lysine 9.



Enzyme Activity Data: Recombinant G9a, human (1 µg) was used in a methylation assay with 4 µg human nucleosomes and radioactive SAM and the reaction was run on a PAGE gel. **Lane 1:** Coomassie stain of the gel. **Lane 2:** autoradiography of the gel. Migration of histones is indicated.

Formulation:

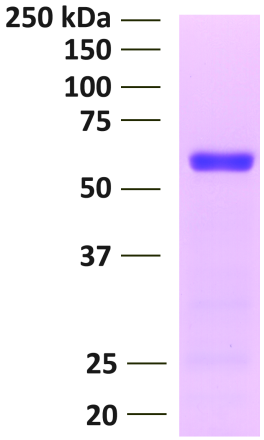
Recombinant GST-G9a (6 µg/µl) in 100mM Tris pH 8.0, 10 mM glutathione and 25% glycerol.

Storage and Stability:

Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

Recombinant G9a, human is useful for histone H3 methylation experiments, enzyme kinetics and inhibitor screening. Use of 1-3 µg G9a per reaction with nucleosomes or recombinant histone H3 as a substrate is recommended. Dilute as needed before using.



Protein Gel Data: Recombinant G9a, human (3.5 µg) run on a PAGE gel and stained with Coomassie blue. Migration and molecular weight of protein standards is indicated.

References:

Kuo AJ et al (2011). *Mol Cell* 44: 609-620.