

Recombinant human EHMT2/G9A protein ab167966

2 Images

Description

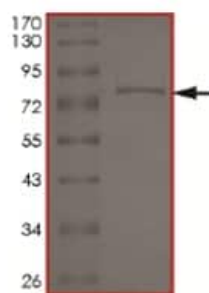
Product name	Recombinant human EHMT2/G9A protein
Biological activity	The specific activity of ab167966 was determined to be 15 nmol/min/mg as per activity assay protocol.
Purity	> 95 % SDS-PAGE. Assessed by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	<u>Q96KQ7</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	RGAD VLTLDNEENICLHWASFTGS AAIAEVLLNA RCDLHAVNYH GDTPLHIAAR ESYHDCVLLF LSRGANPELR NKEGDTAWDL TPERSDVWFA LQLNRKLRLG VGNRAIRTEK IICRDVARGY ENVPIPCVNG VDGEPCPEDY KYISENCETS TMNIDRNITH LQHCTCVDDC SSSNCLCGQL SIRCWYDKDG RLLQEFNKIE PPLIFECNQA CSCWRNCKNR VVQSGIKVRL QLYRTAKMGW GVRALQTIPQ GTFICEYVGE LISDAEADVR EDDSYLFDLD NKDGEVYCID ARYYGNISRF INHLCDPNII PVRVFMLHQD LRFPIAFFS SRDIRTGEEL GFDYGDRFWD IKSXYFTCQC GSEKCKHSAE AIALEQSRLA RLDPHPELLP ELGSLPPVNT
Predicted molecular weight	75 kDa including tags
Amino acids	807 to 1210
Tags	proprietary tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab167966** in the following tested applications.

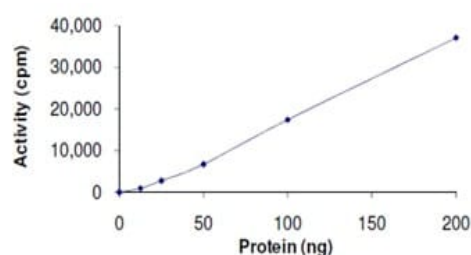
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	Western blot
	SDS-PAGE
Form	Liquid
Preparation and Storage	
Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
	pH: 7.50
	Constituents: 0.31% Glutathione, 0.002% PMSF, 0.004% DTT, 0.79% Tris HCl, 0.003% EDTA, 25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride
	This product is an active protein and may elicit a biological response in vivo, handle with caution.
General Info	
Function	Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself.
Tissue specificity	Expressed in all tissues examined, with high levels in fetal liver, thymus, lymph node, spleen and peripheral blood leukocytes and lower level in bone marrow.
Sequence similarities	Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. Suvar3-9 subfamily. Contains 7 ANK repeats. Contains 1 post-SET domain. Contains 1 pre-SET domain. Contains 1 SET domain.
Domain	The SET domain mediates interaction with WIZ. The ANK repeats bind H3K9me1 and H3K9me2.
Post-translational modifications	Methylated at Lys-185; automethylated.
Cellular localization	Nucleus. Chromosome. Associates with euchromatic regions. Does not associate with heterochromatin.
Images	



SDS Page analysis of ab167966

SDS-PAGE - Recombinant human EHMT2/G9A protein (ab167966)



The specific activity of ab167966 was determined to be 15 nmol/min/mg as per activity assay protocol.

Functional Studies - Recombinant human EHMT2/G9A protein (ab167966)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- 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
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors