G-Biosciences Image not found or type unknown

Immunotag™ EHMT1 Monoclonal Antibody

Antibody Specification

Catalog No.	ITM0213
Product Description	Immunotag™ EHMT1 Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	EHMT1
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of EHMT1 expressed in E. Coli.
Specificity	EHMT1 Monoclonal Antibody detects endogenous levels of EHMT1 protein.
Purification	Affinity purification
Form	Purified antibody in PBS containing 0.03% sodium azide.
Gene Name	EHMT1
Accession No.	Q9H9B1 Q5DW34
Alternate Names	EHMT1; EUHMTASE1; GLP; KIAA1876; KMT1D; Histone-lysine N-methyltransferase EHMT1; Euchromatic histone-lysine N-methyltransferase 1; Eu-HMTase1; G9a-like protein 1; GLP; GLP1; Histone H3-K9 methyltransferase 5; H3-K9-HMTase 5; Lysine N-methy

Antibody Specification

Description	euchromatic histone lysine methyltransferase 1(EHMT1) Homo sapiens The protein encoded by this gene is a histone methyltransferase that is part of the E2F6 complex, which represses transcription. The encoded protein methylates the Lys-9 position of histone H3, which tags it for transcriptional repression. This protein may be involved in the silencing of MYC- and E2F-responsive genes and therefore could play a role in the G0/G1 cell cycle transition. Defects in this gene are a cause of chromosome 9q subtelomeric deletion syndrome (9q-syndrome, also known as Kleefstra syndrome). Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014],
Cell Pathway/ Category	Lysine degradation,
Protein Expression	Brain,Cervix carcinoma,Lymph node,Teratocarcinoma,Testis,
Subcellular Localization	nucleus,nucleoplasm,chromosome,
Protein Function	Experimental confirmation may be lacking for some isoforms,catalytic activity:S-adenosyl-L-methionine + histone L-lysine = S-adenosyl-L-homocysteine + histone N(6)-methyl-L-lysine.,disease:Defects in EHMT1 are the cause of chromosome 9q subtelomeric deletion syndrome (9q- syndrome) [MIM:610253]. Common features seen in these patients are severe mental retardation, hypotonia, brachy(micro)cephaly, epileptic seizures, flat face with hypertelorism, synophrys, anteverted nares, cupid bow or tented upper lip, everted lower lip, prognathism, macroglossia, conotruncal heart defects, and behavioral problems.,domain:The SET domain mediates interaction with WIZ.,function:Histone methyltransferase. Methylates 'Lys-9' of histone H3 (in vitro). H3 'Lys-9' methylation represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,sequence caution:Intron retention.,similarity:Belongs to the histone-lysine methyltransferase family.,similarity:Contains 1 pre-SET domain.,similarity:Contains 1 SET domain.,similarity:Contains 8 ANK repeats.,subcellular location:Associates with euchromatic regions.,subunit:Part of the E2F6.com-1 complex in G0 phase composed of E2F6, MGA, MAX, TFDP1, CBX3, BAT8, EUHMTASE1, RING1, RNF2, MBLR, L3MBTL2 and YAF2. Interacts with WIZ and EHMT2.,tissue specificity:Widely expressed.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.