10320 Camino Santa Fe, Suite G
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GLP Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1049a

Specification

GLP Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9H9B1
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

Description
Glucagon-like peptide-1 (GLP-1) is an incretin hormone secreted from enteroendocrine L cells in response to ingested nutrients. The closely related peptides glucagon-like peptide (GLP-1) and glucagon have opposing effects on blood glucose. GLP-1 induces glucose-dependent insulin secretion in the pancreas, while glucagon stimulates gluconeogenesis and glycogenolysis in the liver. Glucagon is processed from a large precursor, proglucagon, in a tissue-specific manner in pancreatic alpha-cells. The identification of a hybrid peptide acting as both a GLP-1 agonist and a glucagon antagonist would provide a novel approach for the treatment of type 2 diabetes.

Immunogen
Purified recombinant fragment of GLP expressed in E. Coli.

Formulation
Purified antibody in PBS containing 0.03% sodium azide.

GLP Antibody - Additional Information

Gene ID 79813

Other Names
Histone-lysine N-methyltransferase EHMT1, 2.1.1.-, 2.1.1.43, 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-methyltransferase 1D, EHMT1, EUHMTASE1, GLP, KIAA1876, KMT1D

Dilution
WB~~1/500 - 1/2000
E~~N/A

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GLP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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GLP Antibody - Protein Information

Name EHMT1

Synonyms EUHMTASE1, GLP, KIAA1876, KMT1D

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 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. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Represses the expression of mitochondrial function-related genes, perhaps by occupying their promoter regions, working in concert with probable chromatin reader BAZ2B (By similarity).

Cellular Location
Nucleus. Chromosome. Note=Associates with euchromatic regions

Tissue Location
Widely expressed..

GLP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GLP Antibody - Images

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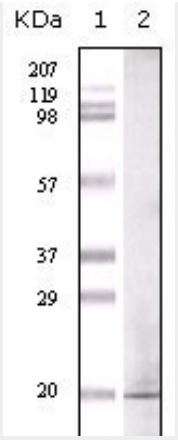

Figure 1: Western blot analysis using GLP mouse mAb against GLP recombinant protein.

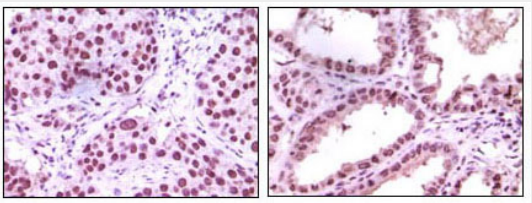

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma (left) and kidney carcinoma (right), showing nuclear localization using LSD1 mouse mAb with DAB staining.

GLP Antibody - References

1. Clark Q. Pan, Joanne M. Buxton, Stephanie L. Yung, et al. J Biol Chem. 2006 Feb 27. 2.Michael F. Crutchlow, Jee-Young Nina Ham, et al. Int J Biochem Cell Biol. 2006;38(5-6):845-859. 3.Andrew Young Adv Pharmacol. 2005;52:151-71.