

GLP Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1049a

Product Information

Application WB, E **Primary Accession Q9H9B1** Reactivity Human Host Mouse Monoclonal Clonality **Clone Names** 1B7B4 Isotype IgG1 **Calculated MW** 141466

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.

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.

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..

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.

Images

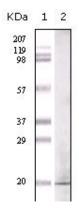


Figure 1: Western blot analysis using GLP mouse mAb against GLP recombinant protein.

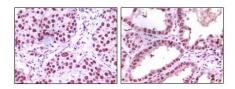


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma (left) and kidney carcinoma (right), showing nuclear localization using LSD1 mouse mAb with DAB staining.

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