CREATIVE BIOMART®
Assay Kit

GLP SAM-Screener Assay Kit

Product Information

Cat.No.

Kit-1956

Size

384 wells

Description

Most histone lysine methyltransferases contain a conserved domain (SET) that utilizes S-adenosyl-L-methionine (SAM or AdoMet) as a co-factor to catalyze the methylation of the epsilon amino group of lysine. G9a-like protein (GLP) is a SET domain-containing methyltransferase that specifically mono- and di-methylates histone H3 at lysine 9 (H3K9). GLP and G9a function as major euchromatic H3K9me1 and H3K9me2 histone methyltransferases and also have been found to methylate several nonhistone substrates, including p53(K372). This fluorescence polarization assay is based upon a proprietary small molecule fluorescent probe* that binds to the SAM binding pocket in GLP. Binding of the small molecule probe to GLP induces an increase in fluorescence polarization. Binding of the probe can be competed with the endogenous cofactor SAM or by the inhibitor sinefungin, but is unaffected by the histone H3 peptide substrate. The GLP SAM-Screener Assay is robust (Z >0.5) and exhibits a greater than 100 mP shift over a range of 0-250 nM GLP. The assay is suitable for high-throughput screening in the provided 384-well plate or can be scaled to higher density plate formats (e.g., 1,536-well) if desired. *United States Patent 9,120,820

Storage

-80°C

Kit Components

SAM-Binding Site Assay Buffer (10X): 1 vial/2 ml, 1 vial/10 ml; -20°CGLP (human recombinant) Assay Enzyme: 1 vial/125 μl, 5 vials/125 μl; -80°C SAM-Binding Site Probe: 1 vial, 5 vials; -20°C SAM-Binding Site Positive Control: 1 vial/40 μg, 5 vials/40 μg; -20°C384-Well Solid Plate (low volume; black): 1 plate, 5 plates; RT Foil Plate Covers: 1 cover, 5 covers; RT

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