

SET8 Methyltransferase Inhibitor Screening Assay Kit

Product Information

Cat.No.

Kit-2023

Description

SET Domain-containing Protein 8 (SET8) is a methyltransferase that selectively mono-methylates histone H4 at lysine residue 20 (H4K20), an event proven to have an important role in chromatin structure and transcriptional activation. The SET8 Methyltransferase Inhibitor Screening Assay provides a convenient method for screening human SET8 inhibitors. The transfer of the methyl group from SAM by SET8 (provided in the kit) to the acceptor peptide (H4K20) generates S-adenosylhomocysteine, which is rapidly converted to urate and hydrogen peroxide (H₂O₂) using an enzyme mixture provided in the kit. The H₂O₂ formed is quantified using 10-acetyl-3,7-dihydroxyphenoxazine (ADHP) to produce the highly fluorescent compound resorufin (excitation 530-540 nm; emission 585-595 nm).

Storage

-80°C

Kit Components

MT Assay Buffer: 1 vial/20 ml; -20°C MT Assay Buffer Additive: 1 vial/200 µl; -20°C MT Enzyme Mixture: 3 vials/300 µl; -80°C MT Fluorometric Mixture: 3 vials; -20°C MT Assay S-Adenosylmethionine: 3 vials; -80°C SET8 (human recombinant): 2 vials/100 µl; -80°C DMSO Assay Reagent: 1 vial/1 ml; Room temperature HCl Assay Reagent (20 mM): 1 vial/1 ml; -20°C SET8 Assay Acceptor Peptide: 2 vials/600 µl; -20°C MT Assay AdoHcy Positive Control: 1 vial/200 µl; -80°C Half Volume 96-Well Solid Plate (black): 1 plate; Room temperature 96-Well Cover Sheet: 1 cover Room; temperature