

Universal Methyltransferase Activity Assay Kit (for HTP)

Product Information

Cat.No.

Kit-0469

Product Overview

Universal Methyltransferase Activity Assay Kit (for HTP) is a mix-and-read fluorescent assay for high throughput (HTP) screening of candidate compounds that can affect the activity of S-adenosyl-L-methionine (SAM)-dependent methyltransferases. In this kit SAM is provided separately from the Reaction Buffer, allowing the investigator to customize the concentration needed for each methyltransferase of interest.

Size

1 x 96 tests

Description

Methylation of proteins, nucleic acids and oligosaccharides is an important post-translational regulatory event. Activities that are methylation-related include meiosis, biosynthesis, development, signal transduction, chromatin regulation, and gene silencing. The enzymes that mediate the covalent transfer of a methyl group from a donor to an acceptor molecule are methyltransferases. Methyltransferases have structurally unrelated acceptors as diverse as proteins and DNA, however frequently use S-adenosylmethionine as a universal donor. Part of the acceptor diversity of this enzyme family relates to the flexible structural folds that bind these molecules in proximity of the donor. The side-chains of lysine, arginine, glutamate, glutamine, asparagines, and isoprenylated residues serve as methylation sites in proteins like histones. Changes in methylation patterns have been tightly linked to disease states such as cancer and vascular disease.

Applications

Functional Studies more details

Kit Components

Components: 1 x 96 tests; Black Microtiter Plate: 1 unit; Foil Plate Sealer: 3 units; Methyltransferase Positive Control: 1 x 0.2ml; S-Adenosylmethionine: 1 x 0.5ml; SAM-Free Methyltransferase Reaction

Universal Methyltransferase Activity Assay Kit (for HTP)

Buffer Concentrate: 1 x 0.3ml; Transferase Assay Buffer Concentrate: 1 x 15ml; Transferase Detection Solution Concentrate: 1 x 0.15ml

Compatible Sample Types

Purified protein
