

Universal Methyltransferase Activity Assay Kit

Product Information

Cat.No.

Kit-0468

Product Overview

Universal Methyltransferase Activity Assay Kit is a homogeneous mix-and-read fluorescent assay for the determination of any S-adenosyl-L-methionine (AdoMet/SAM) dependent methyltransferase activity. It is suitable for end-point or kinetic read options, which is ideal for determining mechanism of action, kinetics, and screening candidate compounds. The assay is amendable to HTS and miniaturization. The kit is a complete kit for the screening of candidate compounds that may alter normal methyltransferase activity.

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; Methyltransferase Positive Control: 1 x 0.2ml;

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Methyltransferase Reaction Buffer Concentrate: 1 x 0.3ml; Plate Sealer: 1 x 3 units; Transferase Assay Buffer Concentrate: 1 x 15ml; Transferase Detection Solution Concentrate: 1 x 0.15ml

Compatible Sample Types

Purified protein
