



Methyltransferase Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1087

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Description

Methyltransferases are a diverse group of enzymes that function to methylate protein, DNA, and small molecule targets. Accordingly, methyl transferase activity plays a critical role in modulating gene transcription, protein interactions, and signaling networks. Anomalous DNA methylation pattern has been consistently detected during cancer development as well as in many genetic disorders such as Fragile X Syndrome, ICF, and Rett Syndrome. Methyltransferase Activity Fluorimetric Assay Kit allows for kinetic evaluation of methyltransferase activity of purified enzymes. The transfer of a methyl group from S-Adenosyl Methionine (SAM) cofactor to a corresponding substrate generates S-Adenosyl Homocysteine (SAH) product. SAH is detected by coupling the methyl transfer reaction to a multi-step enzymatic cascade, resulting in the generation of an intermediate that reacts with OxiRed; Probe. The fluorescent product is measured at Ex/Em = 535/587 nm. The limit of quantification (L.O.Q) is 7.5 pmol of SAH generated per min per ml (7.5 μ U/ml) in purified enzymes.

Applications

Measurement of Methyltransferase activity in purified/crude enzyme preparations and analysis of methyltransferase inhibitors

Storage

-20°C

Shipping

Gel Pack

Size



Methyltransferase Activity Assay Kit (Fluorometric)

100 assays

Kit Components

MT Assay Buffer; Enzyme Re-suspension Buffer; Enzyme Mix I; Enzyme Mix II; Enzyme Mix III; SAM Cofactor (0.5 mM); SAH Standard (100 μ M); MT Positive Control; OxiRed; Probe

Target Species

Mammalian

Detection method Fluorescence (Ex/Em 535/587 nm)

Features & Benefits

Simple, rapid & convenient assay to measure Methyltransferase Activity in purified enzyme;
Includes Positive Control
