

Histone H4(R3) Methyltransferase Assay Kit

Product Information

Cat.No.

Kit-1746

Product Overview

Histone H4 (R3) methyltransferases are enzymes that catalyze the transfer of a methyl group from the cofactor S-adenosylmethionine to arginine 3 residue of histone H4. This group of enzymes includes PRMT1, PRMT3, and PRMT5.

Size

96 reactions

Description

The Histone H4(R3) Universal Methyltransferase Assay Kit is designed for the detection of histone H4(R3) methyltransferase (HMT) activity in screening and profiling applications. The key to the Histone H4(R3) Universal Methyltransferase Assay Kit is a highly specific antibody that recognizes methylated R3 residue of Histone H4. With this kit, only three simple steps on a microtiter plate are required for methyltransferase detection. First, S-adenosylmethionine is incubated with a sample containing assay buffer and methyltransferase enzyme for one hour. Next, primary antibody is added. Finally, the plates are treated with an HRP-labeled secondary antibody followed by addition of the HRP substrate to produce chemiluminescence that can then be measured using a chemiluminescence reader.

Applications

Great for studying enzyme kinetics and screening small molecular inhibitors for drug discovery and HTS applications.

Storage

12 months from date of receipt, when stored as directed. Kit components require different storage conditions. Be sure to store each component at the proper temperature upon arrival.

Kit Components

Histone H4(R3) Methyltransferase Assay Kit

PRMT1 human recombinant enzyme: 500 ng; -80°C PRMT3 human recombinant enzyme: 2 µg; -80°C
PRMT5 human recombinant enzyme: 7.5 µg; -80°C 20 µM S-adenosylmethionine: 250 µl; -80°C
Primary antibody 4: 100 µl; -80°C Secondary HRP-labeled antibody 2: 10µl; -80°C 4x HMT Assay Buffer
2: 3 ml; -20°C Blocking buffer: 35 ml; +4°C HRP chemiluminescent substrate (2 components): 6 ml;
each +4°C 96-well plate precoated with histone substrate: 1 plate; +4°C
