



SIRT6 Inhibitor Screening Kit (Fluorometric)

Product Information

Cat

Kit-2341

Cat.No.

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Product Overview

SIRT6 or Sirtuin 6 proteins are a class of proteins that possess either histone deacetylase or mono-ribosyltransferase activity. SIRT6 is a nuclear sirtuin that has been associated with aging, cellular protection, sugar metabolism and certain types of cancer. Broad therapeutic applications are foreseen for SIRT6 inhibitors, including uses in diabetes, immune-mediated disorders, and cancer. Unlike other known protein deacetylases, which simply hydrolyze acetyl-lysine residues, the sirtuin-mediated deacetylation reaction hydrolyzes acetyl-lysine and NAD. This hydrolysis yields the deacetylated substrate, O-acetyl-ADP-ribose and nicotinamide, itself an inhibitor of sirtuin activity. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. In Sirtuin 6 inhibitor screening Kit, Sirtuin 6 deacetylates the substrate, followed by cleavage of the deacetylated substrate to release the fluorescent group, which is detected fluorometrically at Ex/Em = 395/541 nm. In the presence of SIRT inhibitor, deacetylation is impeded, preventing cleavage of the substrate and release of the fluorescent group. This kit provides a rapid, simple, sensitive, and reliable test, which is suitable for high-throughput screening of SIRT6 inhibitors. Inhibitor control (Nicotinamide) is included to compare the efficacy of the test inhibitors.

Applications

Screening/characterizing/studying SIRT6 inhibitors

Storage

-20°C

Shipping

Gel Pack



SIRT6 Inhibitor Screening Kit (Fluorometric)

Size

100 assays

Kit Components

SIRT6 Assay Buffer; Substrate; Cofactor; Developer; SIRT6 Enzyme; Enzyme Reconstitution Buffer; Inhibitor (Nicotinamide, 4 mM)

Detection method Fluorescence (Ex/Em = 395/541 nm)

Features & Benefits

Simple and reliable test to screen SIRT6 inhibitors; High-throughput suitable; Includes Inhibitor Control (Nicotinamide)