

## SIRT2 fluorometric drug discovery assay Kit

### Product Information

#### Cat.No.

Kit-0786

#### Product Overview

Useful for inhibitor screening or characterizing enzyme kineticsIncludes optimal substrate selected from a panel of acetylated sites in p53 and histonesSupplied with enough recombinant enzyme for 96 assays (1 x 96-well plate)

#### Size

96 wells

#### Description

A FLUOR DE LYS fluorescent assay system. The SIRT2 Fluorescent Activity Assay/Drug Discovery Kit is a complete assay system designed to measure the lysyl deacetylase activity of the recombinant human SIRT2 included in the kit. The kit is ideal for chemical library screening for candidate inhibitors or activators or kinetic assay of the enzyme under varying conditions. The FLUOR DE LYS SIRT2 assay is based on the FLUOR DE LYSSubstrate and FLUOR DE LYS Developer combination. The assay procedure has two steps. First, the FLUOR DE LYS SIRT2 Substrate, which comprises a unique peptide based on amino acids 317-320 of p53 (Gln-Pro-Lys-Lys (Ac)), is incubated with SIRT2. Deacetylation of the substrate sensitizes the substrate so that, in the second step, treatment with the FLUOR DE LYSDeveloper II produces a fluorophore.

#### Applications

Fluorescence microscopy, HTS

#### Storage

-80°C

#### Kit Components

SIRT2 (Sirtuin 2, hSir2) (human, recombinant)(500 U, one U=1 pmol/min at 37°C, 500µM, FLUOR DE LYS-SIRT2 substrate, 500µM NAD ; Recombinant enzyme dissolved in 25mM TRIS, pH 7.5, 100mM sodium

## SIRT2 fluorometric drug discovery assay Kit

chloride, 5mM dithiothreitol and 10% glycerol. See vial label for activity and protein concentrationsStorage: -70°C, avoid freeze/thaw cycles!FLUOR DE LYS-SIRT2, Deacetylase substrate(100µl; 5mM solution in 25mM TRIS/Cl, pH 8.0, 137mM sodium chloride, 2.7mM potassium chloride, 1mM magnesium chloride)FLUOR DE LYS Developer II Concentrate (5x) (5 x 250 µl; 5x Stock Solution; Dilute in Assay Buffer before useStorage: -70°C NAD<sup>+</sup> (Sirtuin Substrate)(500 µl; 50 mM  $\beta$ -Nicotinamide adenine dinucleotide (oxidized form) in 50mM TRIS/CL, pH 8.0, 137mM sodium chloride, 2.7mM potassium chloride, 1mM magnesium chloride)Storage: -70°C Nicotinamide (Sirtuin Inhibitor)(500µl; 5 mM Nicotinamide in 50mM TRIS/Cl, pH 8.0, 137mM sodium chloride, 2.7mM potassium chloride, 1mM magnesium chloride)Storage: -70°C Suramin sodium (Sirtuin Inhibitor)(10 mg; Solid MW: 1429.2, soluble in water or assay buffer (to 25mM))Storage: -70°C FLUOR DE LYS Deacetylated Standard (30 µl; 10mM in DMSO)Storage: -70°C Sirtuin Assay Buffer(20 ml; 50mM TRIS/Cl, pH 8.0, 137mM sodium chloride, 2.7mM potassium chloride, 1mM magnesium chloride, 1 mg/ml bovine serum albumin)Storage: -70°C 1/2 volume microplateStorage: Room temperature1/2 volume white microplateStorage: Room temperature