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Data Sheet

Fluorogenic Sirtuin 5 Substrate Catalog #: 50126

DESCRIPTION: A fluorogenic, succinylated peptide substrate for Sirtuin 5. This substrate should be used in conjunction with SIRT Developer, #50089. Optimal excitation wavelength 350–380 nm, emission wavelength 440–460 nm.

PURITY: >90% by HPLC.

APPLICATIONS: Suitable for use with BPS's Fluorogenic SIRT5 Assay Kit, #50085, and to study enzyme kinetics and screen small molecule inhibitors of Sirtuin 5 for drug discovery and HTS applications.

SUPPLIED AS: DMSO solution

QUANTITY: 50 µl @ 5 mM

STORAGE: -20 °C or -70 °C. Avoid freeze/thaw cycles. Stable for at least 6 months from date of receipt when stored as directed. Protect from light.

REFERENCES:

- 1. Madsen, A.S. and Olsen, C.A., *J. Med. Chem.* 2012, **55:**5582-5590.
- 2. Du, J., et al., Science, 11 November 2011, 334:806-809.

ASSAY PROTOCOL:

Materials:

SIRT Assay Buffer (BPS # 50090) SIRT5 Substrate (# 50126) SIRT5 enzyme (# 50016) or other SIRT5-containing sample NUNC black 96-well plate, low protein binding (VWR #62408-936). SIRT Assay Developer (BPS # 50089)

Step 1:

Set up 50 μ l of Sirt5 reactions containing SIRT assay buffer, 400 ng SIRT5 enzyme, and 20 μ M SIRT5 substrate in the 96-well plate. Incubate at 37 $^{\circ}$ C for 30 min.



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Step 2:

Add 50 μ l of SIRT Assay Developer (2x) (BPS #50089) to each well and incubate the plate at room temperature for 15 min.

Step 3:

Read sample in a microtiter-plate reading fluorimeter capable of excitation at a wavelength in the range 350-380 nm and detection of emitted light in the range 440-460 nm. "Blank" value (no enzyme control) is subtracted from all other values.