



LSD1 Inhibitor Screening Assay Kit

Product Information

Cat.No.

Kit-1969

Size

96 wells

Description

Lysine-specific demethylase 1 (LSD1) is a histone demethylase whose actions on specific lysine residues repress transcription of chromosomal DNA. LSD1 also inhibits the tumor suppressor activity of p53 by demethylating a specific lysine residue. Inhibitors of LSD1 are important tools used to elucidate mechanisms of transcription and cell cycle progression and have therapeutic potential for treating cancer. The LSD1 Inhibitor Screening Assay Kit provides a convenient fluorescence-based method for screening LSD1-specific inhibitors. The assay is based on the multistep enzymatic reaction in which LSD1 first produces H₂O₂ during the demethylation of lysine 4 on a peptide corresponding to the first 21 amino acids of the N-terminal tail of histone H3. In the presence of horseradish peroxidase, H₂O₂ reacts with ADHP to produce the highly fluorescent compound resorufin that can be analyzed with an excitation wavelength of 530-540 nm and an emission wavelength of 585-595 nm.

Storage

-80°C

Kit Components

LSD1 Assay Buffer (10X): 1 vial; -20°C LSD1 (human recombinant) Assay Reagent: 2 vials; -80°C LSD1 Assay Fluorometric Substrate: 3 vials; -20°C LSD1 Assay Horseradish Peroxidase: 2 vials; -20°C LSD1 Assay Peptide: 2 vials; -20°C LSD1 Assay DMSO: 1 vial; -80°C 96-Well Plate (black): 1 plate; Room temperature 96-Well Plate Cover: 1 cover; Room temperature