

15-PGDH Inhibitor Screening Kit

Product Information

Cat.No.

Kit-2098

Product Overview

In this assay, 15-PG is oxidized by 15-PGDH generating 15-Keto metabolites and oxidizing NAD. NADH reduces a Fluorometric probe thus, generating an enhanced and stable fluorescence signal (Ex/Em=535/587 nm). In the presence of an inhibitor, the enzymatic activity is inhibited resulting in No/Low fluorescence. The 15-PGDH Inhibitor Screening Kit offers a rapid, simple, sensitive, and reliable test suitable for high-throughput screening of 15-PGDH inhibitors.

Size

100 assays

Description

15-hydroxyprostaglandin dehydrogenase (15-PGDH, EC: 1.1.1.141) catalyzes the oxidation of Prostaglandins (PG) to 15-keto metabolites which show greatly reduced biological activity when compared to Prostaglandins. 15-PGDH catalyzes the rate-limiting step of PG catabolism. More recently, the inhibition of 15-PGDH has been reported as a negative regulator of tissue repair and inhibition of this enzyme can potentiate tissue regeneration in mouse models. Thus, pharmacological inhibition of 15-PGDH could have clinical implications by accelerating potential tissue regeneration after damage.

Applications

Screening/studying/characterizing 15-PGDH inhibitors.

Storage

Store kit at -20°C, protected from light. Briefly spin small vials prior to opening. Read entire protocol before performing the assay. 15-PGDH Assay Buffer: Bring to room temperature before use. Store at -20°C. Use within two months. PicoProbe: Before use, thaw at room temperature. Store at -20°C. Use within two months. 15-PGDH Developer: Reconstitute with 220 µl of Assay Buffer. Avoid repeated freeze/thaw. Use within two months. Keep on ice while in use. 15-PGDH Substrate and 15-PGDH

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Inhibitor Control: Before use, thaw at room temperature. Store at -20°C. Use within two months.15-PGDH Enzyme: Ready to use. Keep on ice while in use. Store at -20°C. Use within two months.

Kit Components

15-PGDH Assay Buffer: 25 mlPicoProbe (in DMSO): 200 μ l15-PGDH Developer: 1 vial15-PGDH Substrate (in DMSO): 100 μ l15-PGDH Enzyme: 25 μ l15-PGDH Inhibitor Control (in DMSO): 20 μ l

Detection method Fluorescence (Ex/Em = 535/587 nm)

Features & Benefits

- Simple method to screen 15-PGDH inhibitors • High-throughput compatible
