

COX-2 Inhibitor Screening Kit (Fluorometric)

Product Information

Cat

Kit-2323

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Product Overview

Cyclooxygenase (COX), also known as prostaglandin-endoperoxide synthase (PTGS, EC 1.14.99.1), is an enzyme that is responsible for the formation of important biological mediators called prostanoids, including prostaglandins, prostacyclin and thromboxane. COX is the central enzyme in the biosynthetic pathway to prostanoids from arachidonic acid. There are two known isoenzymes: COX-1 and COX-2. COX-1 is constitutively expressed in many tissues and is the predominant form in gastric mucosa and in kidney. COX-2 is not expressed under normal conditions in most cells, but elevated levels are found during inflammation. Pharmacological inhibition of COX by non-steroidal anti-inflammatory drugs (NSAID) can provide relief from the symptoms of inflammation and pain. COX-2 Inhibitor Screening Kit offers a rapid, simple, sensitive, and reliable test suitable for high-throughput screening of COX-2 inhibitors. The assay is based on the fluorometric detection of Prostaglandin G2, the intermediate product generated by the COX enzyme.

Applications

Screening/studying/characterizing COX-2 inhibitors.

Storage

-20°C

Shipping

Gel Pack

Size

100 assays

Kit Components

COX-2 Inhibitor Screening Kit (Fluorometric)

COX Assay Buffer; COX Probe (in DMSO); COX Cofactor (in DMSO); Arachidonic Acid; NaOH;
COX-2, human recombinant; Celecoxib, COX-2 inhibitor (in DMSO)

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

Features & Benefits

Simple method to screen COX-2 inhibitors;
High-throughput;
Includes Inhibitor Control, Celecoxib
