

PAF Acetylhydrolase Activity Colorimetric Assay Kit

Product Information

Cat.No.

Kit-0644

Product Overview

PAF Acetylhydrolase Activity Assay Kit (Colorimetric) is used to measure PAF Acetylhydrolase activity.

Description

Platelet-Activating Factor (PAF or 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine) is an important phospholipid mediator, which has diverse biological activities. PAF is synthesized and secreted by a variety of cells such as mast cells, monocytes, macrophages etc. Upregulated PAF signaling can cause pathological inflammation and also has been found to be responsible for sepsis, shock, and traumatic injury. PAF Acetylhydrolase (PAF-AH or 1-alkyl-2-acetyl-glycerophosphocholine esterase or Lipoprotein-associated phospholipase A2 or Lp-PLA2) (EC 3.1.1.47) hydrolyzes PAF by removing acetyl group at the sn-2 position and converts PAF into biologically inactive form, lyso-PAF. PAF-AH has two forms: extracellular and intracellular that shares some similarities. In human, PAF-AH deficiency leads to severe asthma. Therefore early detection of PAF-AH activity is critical for mechanistic study, diagnosis, prevention, and therapeutic purpose. The PAF Acetylhydrolase Activity Assay Kit (Colorimetric) provides a quick and easy way for monitoring PAF-AH activity in a variety of samples. In this kit, PAF-AH hydrolyzes the acetyl thioester bond at sn-2 position of substrate and free thiols are detected using DTNB. The assay is simple, sensitive, and high-throughput adaptable. Detection limit:< 0.1 mU.

Applications

Measurement of PAF-AH activity in various samples
Study/characterize PAF-AH inhibitors or activators
Mechanistic study of inflammatory disorders

Target Species

Mammals

Usage

PAF Acetylhydrolase Activity Colorimetric Assay Kit

For research use only (RUO)

Storage

Store the kit at -20°C, protected from light.

Kit Components

PAF-AH Assay Buffer 50 mL PAF-AH Substrate 100 μ L DTNB Probe (in DMSO) 100 μ L TCEP 50 μ L PAF-AH Positive Control 1 vial

Detection method Colorimetric

Compatible Sample Types

Animal tissues such as liver, kidney, etc Adherent or suspension cells Serum, Plasma
