

Leucine Aminopeptidase (LAP) Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-2198

Cat.No.

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Product Overview

Leucine aminopeptidases (EC 3.4.11.1) (LAPs) are a diverse set of exopeptidases that catalyze the hydrolysis of leucine residues from the amino-termini of proteins or peptides. LAPs are ubiquitous enzymes present among animals, plants and prokaryotes. Previously, they were thought to typically play important roles in cell maintenance, growth and development. However, research in the recent years has identified multiple secondary functions for these enzymes in animals and microbes including transcriptional regulation and vesicle transport. Studies have implicated LAP enzymes in tumor cell proliferation, invasion and angiogenesis. Placental LAP is used as a biomarker in ovarian epithelial cancer while adipocyte-derived LAP is used as a marker of endometrial cancer cell proliferation and differentiation. LAP enzymes are also known to be involved in catabolism of oxytocin and vasopressin and insulin regulation of GLUT4 receptors in diabetes. Leucine Aminopeptidase assay kit provides a quick, sensitive and easy way for measuring total LAP activity in various samples. In this assay, LAPs hydrolyze leucine from the fluorescent probe and the amount of fluorescent probe detected at Ex/Em 368/460 nm is used to determine the total activity of the LAP enzymes. The assay is simple to perform, high-throughput adaptable and can detect less than 0.1 mU of LAP activity.

Applications

Detection of LAP activity in mammalian tissues, cell culture and purified enzyme.

Storage

-20°C

Shipping

Gel Pack

Leucine Aminopeptidase (LAP) Activity Assay Kit (Fluorometric)

Size

100 assays

Kit Components

LAP Assay Buffer; LAP Substrate; AMC-Standard (1 mM); LAP Positive Control

Target Species

Mammalian

Detection method Fluorometric (Ex/Em = 368/460 nm)

Features & Benefits

Simple one-step reaction;

Takes only 1-2 hrs;

Non-radiometric fluorescent detection;

HTP adaptable