

Diamine Oxidase Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1074

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Description

Diamine Oxidase (DAO, E.C. 1.4.3.22) is an important regulator of polyamine levels in human physiology. DAO metabolizes the oxidative conversion of biogenic polyamines such as putrescine and cadaverine into aldehydes. Biogenic amines are known regulators of important biological pathways such as cell growth and signal transduction, placing DAO in an important regulatory position in maintaining cell viability. Putrescine itself is also an activator of c-jun and c-fos expression, further linking this diamine with potential roles in cancer development. DAO is notably involved in regulating growth and differentiation of intestinal mucosa, bone marrow, and other rapidly proliferating tissue. In addition to its role in tissue growth, DAO activity is important in metabolism. Loss of diamine oxidase activity can lead to histamine intolerance and histamine poisoning. Diamine Oxidase Activity Assay Kit provides a straightforward method to determine DAO activity of tissue lysates as well as recombinant enzymes, with a detection limit of less than 1 pmole/min of activity. In the assay, DAO converts the provided substrate, yielding an intermediate and H₂O₂. H₂O₂ is then utilized by the DAO Enzyme Mix to generate fluorescence (Ex/Em = 535/587 nm) from the DAO Probe.

Applications

Measurement of Diamine Oxidase (DAO) in various biological samples.

Storage

-20°C

Shipping

Gel Pack

Diamine Oxidase Activity Assay Kit (Fluorometric)

Size

100 assays

Kit Components

DAO Assay Buffer; DAO Probe (in DMSO); DAO Substrate (Lyophilized); DAO Enzyme Mix (Lyophilized); H₂O₂ Standard (0.88 M); DAO Positive Control (Lyophilized)

Target Species

Mammalian/Bacterial

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

Features & Benefits

Rapid & Convenient;

The assay can detect as little as 1 μ U of DAO enzymatic activity.;

Includes DAO Enzyme as Positive Control