

Chymotrypsin Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1059

Common Name

Chymotrypsin

Cat.No.

Kit-1059

Description

Chymotrypsin (EC 3.4.21.1) is a key serine protease involved in dietary protein digestion in mammals. It is primarily produced by the pancreas, but may be expressed in other tissues, including spleen and liver. In the pancreas, chymotrypsin is initially expressed as the inactive proenzyme chymotrypsinogen, which is cleaved by other proteases to chymotrypsin, its active form. Chymotrypsin specifically cleaves peptide bonds at the C-terminal end of bulky hydrophobic or aromatic amino acids (such as tyrosine, tryptophan or phenylalanine). Chymotrypsin Activity Assay kit uses a synthetic fluorogenic substrate, enabling kinetic measurement of chymotrypsin activity in cell and tissue lysates. A chymotrypsin activator cleaves chymotrypsinogen to form active chymotrypsin, which then hydrolyzes the non-fluorescent substrate to release a stable fluorophore (Ex/Em = 380/460 nm). The kit includes a selective chymotrypsin inhibitor that can be used to measure specific chymotrypsin activity in samples containing non-specific proteases and endopeptidases that may also metabolize the substrate. The assay can detect as low as 0.01 mU of Chymotrypsin.

Applications

Measurement of chymotrypsin activity in tissues / cultured cells.

The assay can detect as low as 0.01 mU of Chymotrypsin in various samples.

Storage

-20°C

Chymotrypsin Activity Assay Kit (Fluorometric)

Shipping

Gel Pack

Size

100 assays

Kit Components

Chymotrypsin Assay Buffer; Chymotrypsin Substrate; Chymotrypsin Activator; Chymotrypsin Inhibitor; Coumarin Standard (1 mM); Chymotrypsin Positive Control

Target Species

Mammalian

Detection method Fluorescence (Ex/Em= 380/460 nm)

Features & Benefits

Simple procedure; takes ~ 1-2 hours; Fast and convenient