

20S Proteasome Assay Kit

Product Information

Cat.No.

Kit-0722

Product Overview

20S Proteasome Assay Kit is a fluorescence-based method for assaying the activity of 20S proteasome.

Description

The proteasome is a multicatalytic proteinase complex that is involved in the selective degradation of intracellular proteins. The 20S proteasome is the proteolytic core particle of a large protein degradation complex, the 26S proteasome. This 700 kDa protein is ubiquitously distributed in both the cytoplasm and the nucleus in all eukaryotes. The protein is responsible for degrading many cell-cycle control factors, signal transduction factors, transcription factors, and oncogene and anti-oncogene products, thus controlling cell proliferation, differentiation, and apoptosis. Changes in expression of the 20S proteasome have been documented in a number of physiological and pathological conditions such as skeletal muscle atrophy and Alzheimer neurodegeneration. Ethanol inhibits proteasome activity, resulting in the accumulation of insoluble protein aggregates known as Mallory bodies, a common signature of alcoholic liver diseases. On the other hand, proteasome inhibitors exhibit anti-inflammatory and antiproliferative effects, evidence that the proteasome may be an important drug target for the treatment for cancer and inflammatory diseases.

Usage

For research use only (RUO)

Storage

Kit will arrive packaged as a -80°C kit. For best results, remove components and store as stated below.

Item	Storage
20S Proteasome Positive Control	-80°C
20S Proteasome Substrate (SUC-LLVY-AMC)	-20°C
Cell-Based Assay Epigallocatechin Gallate (EGCG)	-20°C
20S Proteasome Assay Buffer	Room Temperature
20S Proteasome Lysis Buffer	Room Temperature
96-Well Solid Plate (black) with lid	Room Temperature

20S Proteasome Assay Kit

Kit Components

20S Proteasome Positive Control 1 vial 20S Proteasome Substrate (SUC-LLVY-AMC) 1 vial Cell-Based Assay Epigallocatechin Gallate (EGCG) 1 vial 20S Proteasome Assay Buffer 1 vial 20S Proteasome Lysis Buffer 1 vial 96-Well Solid Plate (black) with lid 1 plate
