



Proteasome Activity Fluorometric Assay Kit

Product Information

Cat

Kit-0724

Common Name

Proteasome

Cat.No.

Kit-0724

Product Overview

Simple one-step procedure; takes only 30-60 minutes
Accurate and easy to use

Description

Proteasomes are very large (20S, 26S) protein assemblies found in both the nucleus and cytoplasm of all eucaryotes (and in some procaryotes). They are responsible for the degradation and recycling of proteins which have been previously tagged with ubiquitin. Such tagged proteins are degraded into peptides approximately 7-8 amino acids long which are subsequently further degraded. The 20S assembly is the functional protease structure with chymotrypsin-like, trypsin-like and caspase-like protease activities. Proteasome Activity Assay takes advantage of the chymotrypsin-like activity, utilizing an AMC-tagged peptide substrate which releases free, highly fluorescent AMC in the presence of proteolytic activity. The kit also includes a positive control (Jurkat Cell lysate with significant proteasome activity) and a specific proteasome inhibitor MG-132 which suppresses all proteolytic activity due to proteasomes. This permits differentiation of proteasome activity from other protease activity which may be present in samples.

Applications

Specifically measures proteasome activity from other protease activity present in samples..

Usage

For Research Use Only! Not For Use in Humans



Proteasome Activity Fluorometric Assay Kit

Storage

-20°C

Size

100 assays

Kit Components

- Proteasome Assay Buffer
- Proteasome Substrate (In DMSO)
- Proteasome Inhibitor (In DMSO)
- AMC Standard (1 mM in DMSO)
- Positive Control

Target Species

Mammalian

Detection method Fluorescence (Ex/Em 350/440nm)

Compatible Sample Types

Whole cell lysates, nuclear and cytoplasmic lysates