

## 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