



TAME

Catalog No: tcsc0466



Available Sizes

Size: 50mg

Size: 100mg



Specifications

CAS No:

901-47-3

Formula:

 $C_{14}H_{22}N_4O_4S$

Pathway:

Cell Cycle/DNA Damage

Target:

APC

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

342.41

Product Description

TAME is an inhibitor of anaphase-promoting complex (**APC**), which prevents its activation by Cdc20 and Cdh1; TAME is also an inhibitor of cyclin proteolysis in mitotic Xenopus egg extract, with an IC₅₀ of 12 μ M.

IC50 & Target: IC50: 12 μM (cyclin proteolysis)^[1]

In Vitro: TAME (tosyl-L-arginine methyl ester, 200 μ M) shows inhibitory effect on APC activation when added to mitotic Xenopus





extract. TAME (1-200 μ M) inhibits Cdc20 association with mitotic APC and also inhibits Cdh1 association with interphase APC. TAME significantly inhibits crosslinking of the IR peptide to Cdc27 and Cdc16 but only slightly reduces crosslinking to Cdc23 and Apc7 at 20 μ M; TAME strongly inhibits crosslinking to all APC subunits at 200 μ M. TAME (200 μ M) also inhibits binding of wild type Cdc20 to the APC, but not binding of a Δ IR mutant^[1]. TAME (200 μ M) induces Cdc20 dissociation from the APC in mitotic Xenopus extract calls for APC-dependent ubiquitination. TAME induces Cdc20 dissociation from the APC by promoting Cdc20 ubiquitination, but the dissociation can be suppresses by Cyclin B1. TAME terminates cyclin B1 ubiquitination prematurely^[2]. TAME interacts with ATP by β and γ phosphate and the adenine ring of ATP. TAME in combination with the Mg(II) ion accelerates the ATP hydrolysis process^[3].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!