

# FMK

**Catalog No: tcsc0648**



## Available Sizes

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**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

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**CAS No:**

821794-92-7

**Formula:**

$C_{18}H_{19}FN_4O_2$

**Pathway:**

MAPK/ERK Pathway

**Target:**

Ribosomal S6 Kinase (RSK)

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O :

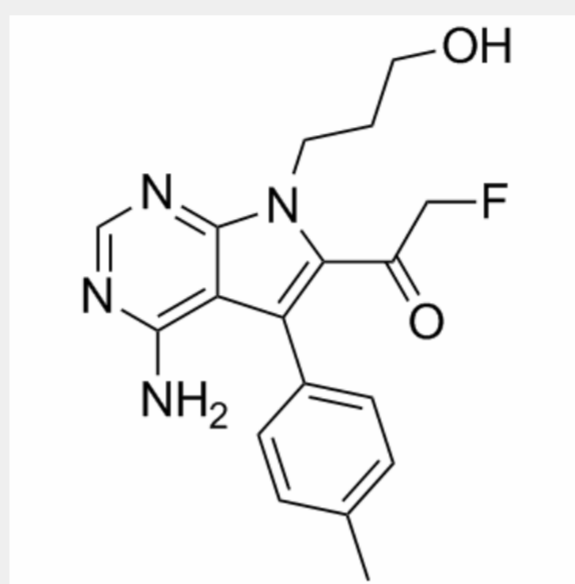
**Observed Molecular Weight:**

342.37

## Product Description

FMK is a an irreversible **RSK2** kinase inhibitor, that covalently modifies the C-terminal kinase domain of RSK.

**In Vitro:** Pretreatment of ARVMs with 3  $\mu$ M fmk attenuates the increase in Ser386 phosphorylation, but it has no inhibitory effect on the increase in Thr577 phosphorylation<sup>[1]</sup>. FMK inhibits relatively few protein kinases in the panel, although it does inhibit protein tyrosine kinases, such as Src, Lck, Yes and Eph-A2, as well as S6K1. FMK will not inhibit RSK if the N-terminal kinase domain are activated by a mechanism that is independent of the C-terminal domain<sup>[2]</sup>. Fmk potently inactivates the CTD auto-kinase activity of RSK1 and RSK2 with high specificity in mammalian cells. Targeting RSK2 by a specific small molecule RSK inhibitor fmk attenuates FGFR3-induced cytokine-independent growth in Ba/F3 cells. FMK inhibits cytokine-independent proliferation of Ba/F3 cells conferred by FGFR3<sup>[3]</sup>.



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