

# BIX 02565

Catalog No: tcsc1659



## Available Sizes

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**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

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**CAS No:**

1311367-27-7

**Formula:**

$C_{26}H_{30}N_6O_2$

**Pathway:**

MAPK/ERK Pathway

**Target:**

Ribosomal S6 Kinase (RSK)

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 20.75 mg/mL (45.25 mM; Need ultrasonic and warming)

**Observed Molecular Weight:**

458.56

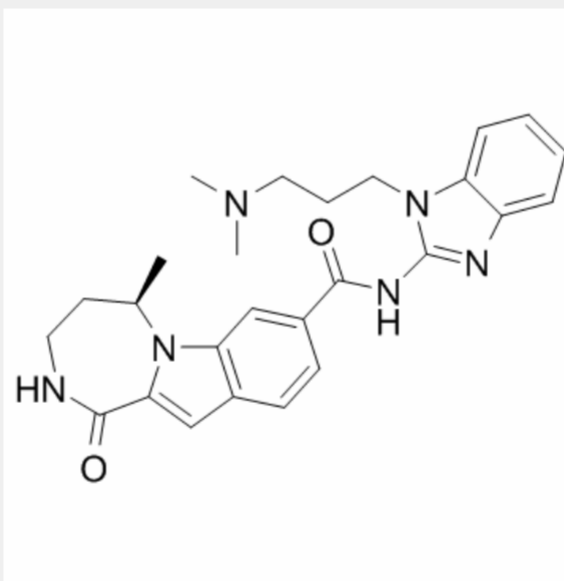
## Product Description

BIX 02565 is a potent ribosomal S6 kinase 2 (**RSK2**) inhibitor with **IC<sub>50</sub>** of 1.1 nM.

IC50 & Target: IC50: 1.1 nM (RSK2)<sup>[1]</sup>

**In Vitro:** BIX 02565, a potent RSK2 inhibitor (IC<sub>50</sub>=1.1 nM) targets for the treatment of heart failure secondary to myocardial infarction through indirect NHE inhibition<sup>[1]</sup>. BIX 02565, a second Rsk inhibitor, protects enzyme active sites from reaction with biotinylated nucleotide acyl phosphates<sup>[2]</sup>.

**In Vivo:** In telemetry-instrumented rats, BIX 02565 (30, 100, and 300 mg/kg p.o. QD for 4 days) elicits concentration-dependent decreases in MAP after each dose (to  $-39 \pm 4$  mm Hg on day 4 at T<sub>max</sub>). BIX 02565 produces concentration-dependent relaxation ex vivo in the phenylephrine-constricted rat aortic ring at concentrations above 0.03  $\mu$ M with a calculated EC<sub>50</sub> of 3.1  $\mu$ M. Subsequently, BIX 02565 is infused in the anesthetized rat in a low-dose (0.1, 0.3, and 1.0 mg/kg per 20 min) and high-dose (1.0, 3.0, and 10.0 mg/kg per 20 min) series of continuous infusions to test the effect of compound on hemodynamics in vivo<sup>[1]</sup>.



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