



# MK-8745

**Catalog No: tcsc5664** 



### **Available Sizes**

Size: 10mg

Size: 50mg

Size: 100mg



## **Specifications**

#### CAS No:

885325-71-3

#### Formula:

 $\mathrm{C_{20}H_{19}CIFN_5OS}$ 

### **Pathway:**

Cell Cycle/DNA Damage; Epigenetics

#### **Target:**

Aurora Kinase; Aurora Kinase

### **Purity / Grade:**

>98%

### **Solubility:**

DMSO :  $\geq$  34 mg/mL (78.72 mM)

### **Observed Molecular Weight:**

431.91

## **Product Description**

MK-8745 is an **aurora A** kinase inhibitor with  $IC_{50}$ s of 0.6 nM.

IC50 & Target: IC50: 0.6 nM (Aurora A)[1]

In Vitro:





MK-8745 induces apoptotic cell death in a p53-dependent manner when tested *in vitro* in cell lines of multiple lineages. Exposure of p53 wild-type cells to MK-8745 results in the induction of p53 phosphorylation (ser15) and an increase in p53 protein expression<sup>[1]</sup>. 1  $\mu$ M of MK-8745 exposure for 24 h induces cell cycle arrest in all NHL cells, with variable degrees of G2/M arrest. Z138C cells are highly sensitive to MK-8745 (1  $\mu$  M) treatment and induces an approximate 5.5-fold increase in the G2/M phase cell population by 96 h. MK-8745 treatment inhibits phosphorylation of Aurora-A in Granta 519 and Z138C cells, while Akata and JVM2 has no effect. MK-8745 specifically inhibits Aurora-A specific function. MK-8745 treatment leads to apoptotic cell death<sup>[2]</sup>.

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