

# Selumetinib

Catalog No: tcsc0059



## Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg

**Size:** 1g

**Size:** 2g



## Specifications

**Application:**

MEK inhibitor

**CAS No:**

606143-52-6

**Formula:**

$C_{17}H_{15}BrClFN_4O_3$

**Pathway:**

MAPK/ERK Pathway

**Target:**

MEK

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 34$  mg/mL (74.29 mM)

#### Alternative Names:

AZD6244;ARRY-142886

#### Observed Molecular Weight:

457.68

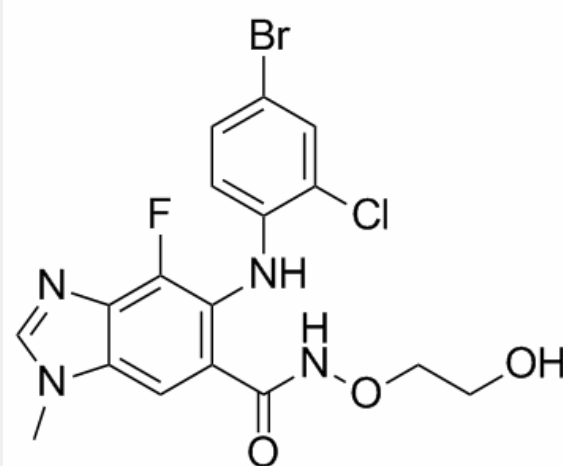
### Product Description

Selumetinib is a highly potent **MEK** inhibitor, with **IC<sub>50</sub>** values of 14 nM and 12 nM against MEK1 and MEK, respectively.

IC50 & Target: IC50: 12 nM (MEK)<sup>[4]</sup>, 14 nM (MEK1)<sup>[3]</sup>

**In Vitro:** Selumetinib causes a time- and dose-dependent reduction in DNA synthesis and cell viability in primary, induces growth arrest and apoptosis associated with the inactivation of ERK in primary 2-1318 cells<sup>[1]</sup>. Selumetinib (1μM) shows anti-proliferative effects through G0/G1 arrest on H-441, H-1437 cells<sup>[2]</sup>. Selumetinib (ARRY-142886) results in the growth inhibition of several cell lines containing B-Raf and Ras mutations but has no effect on a normal fibroblast cell line<sup>[3]</sup>.

**In Vivo:** Selumetinib (AZD6244, 50 and 100 mg/kg, p.o.) decreases the growth rate of 4-1318 xenografts in a dose-dependent manner; AZD6244 when given at the dose of 50 mg/kg also significantly suppresses the growth of the 5-1318, 2-1318, 26-1004, and 29-1104 xenografts<sup>[1]</sup>. Selumetinib (ARRY-142886, 10, 25, 50, or 100 mg/kg, p.o.) is capable of inhibiting both ERK1/2 phosphorylation and growth of HT-29 xenograft tumors in nude mice. Tumor regressions are also seen in a BxPC3 xenograft model<sup>[3]</sup>.



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