

CI-1040

Catalog No: tcsc0058



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg



Specifications

CAS No:

212631-79-3

Formula:

$C_{17}H_{14}ClF_2IN_2O_2$

Pathway:

MAPK/ERK Pathway

Target:

MEK

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 150 mg/mL (313.37 mM)

Alternative Names:

PD 184352

Observed Molecular Weight:

478.66

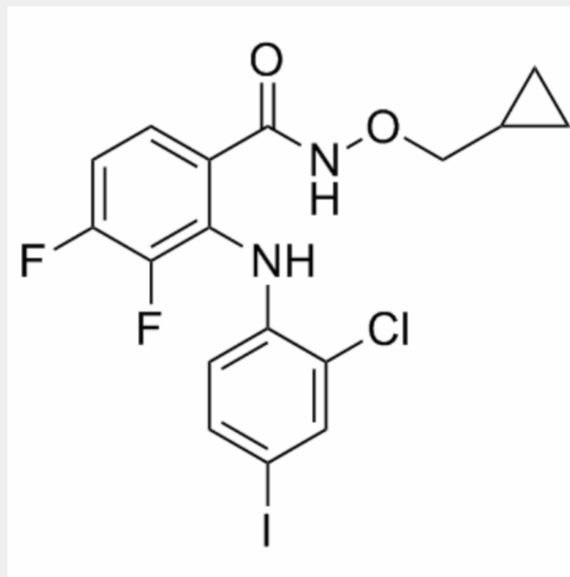
Product Description

CI-1040 (PD184352) is an orally active, highly specific, small-molecule inhibitor of **MEK** with an **IC₅₀** of 17 nM for MEK1.

IC50 & Target: IC50: 17 nM (MEK)^[1]

In Vitro: CI-1040 directly inhibits MEK1 with an IC₅₀ of 17 nM. It has also been shown to have little activity against a panel of related kinases with IC₅₀ values more than 2.5 orders of magnitude higher. Treatment of whole cells with CI-1040 completely inhibits the mitogen-stimulated phosphorylation of ERK. CI-1040 at a concentration of 1 μM is found to inhibit phosphorylation of ERK1 and ERK2 by 99% and 92%, respectively in MDA-MB-231 breast cancer cells^[1]. CI-1040 induces apoptosis and inhibits proliferation in U-937 cells in a dose and time-dependent manner. CI-1040 induces a significant increase in PUMA mRNA and protein levels^[2].

In Vivo: The systemic administration of the MEK inhibitor CI-1040 reduces adenoma formation to a third and significantly restores lung structure. The proliferation rate of lung cells of mice treated with CL-1040 is decreased without any obvious effects on differentiation of pneumocytes^[3].



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