



CI-1040

Catalog No: tcsc0058

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Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg



Specifications

CAS No:

212631-79-3

Formula:

 $\mathsf{C}_{17}^{}\mathsf{H}_{14}^{}\mathsf{CIF}_{2}^{}\mathsf{IN}_{2}^{}\mathsf{O}_{2}^{}$

Pathway:

MAPK/ERK Pathway

Target:

MEK

Purity / Grade:

>98%

Solubility:

DMSO : $\geq 150 \text{ mg/mL} (313.37 \text{ mM})$





Alternative Names:

PD 184352

Observed Molecular Weight:

478.66

Product Description

CI-1040 (PD184352) is an orally active, highly specific, small-molecule inhibitor of \mathbf{MEK} with an $\mathbf{IC}_{\mathbf{50}}$ of 17 nM for MEK1.

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

In Vitro: CI-1040 directly inhibits MEK1 with an IC $_{50}$ of 17 nM. It has also been shown to have little activity against a panel of related kinases with IC $_{50}$ 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 μ M 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!