Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

U0126

Catalog No: tcsc0173

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
1173097-76-1

Formula:
$C_{20}H_{22}N_6OS_2$

Pathway:
Autophagy;MAPK/ERK Pathway;Autophagy

Target:
Autophagy;MEK;Mitophagy

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
U0126-EtOH

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Observed Molecular Weight:
426.56

Product Description

U0126 is a non-ATP competitive **MEK** inhibitor, with **IC_{50}** of 70 nM and 60 nM for **MEK1** and **MEK2**, respectively.

IC50 & Target: IC50: 70/60 nM (MEK1/2)[1]

In Vitro: Treatment with U0126 efficiently reduces progeny virus titers of all tested strains in A549 cells. While nM concentrations of U0126 are efficient to reduce H1N1v and H5N1 (MB1), μM concentrations of U0126 are required to reduce the virus titer of H5N1 (GSB) and H7N7. The EC_{50} values for U0126 against H1N1v are 1.2±0.4 μM in A549 cells and 74.7±1.0 μM in MDCKII cells[2].Rat hepatocarcinoma cells (FAO) stimulated by fetal calf serum (FCS) exhibits a significant proportion in S phase (32.62%) whereas U0126 strongly decreases the proportion of cells in S phase (9.92%) and increases the proportion of cells in G_0-G_1 phase and to a lesser extent in G_2/M[3].

In Vivo: Mice are treated daily with U0126 (i.p., 10.5 mg/kg). In control experiment, tumor sizes are constant or slightly increase all over the kinetic. At the opposite, in all U0126 experiments, engraftment and early tumor growth are significantly decreased. Furthermore, a 60-70% reduction in the volume of tumors treated with U0126 is obtained 9 days after injection and thereafter[3]. Rats are subjected to 120?minutes transient middle cerebral artery occlusion (tMCAO) and thereafter treated with the U0126 (i.p., 30 mg/kg) at 0 and 24 hours of reperfusion. After treatment with U0126, the vasoconstriction to S6c is markedly reduced[4].