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

Dynasore

Catalog No: tcsc1340

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
304448-55-3

Formula:
$C_{18}H_{14}N_2O_4$

Pathway:
Cytoskeleton

Target:
Dynamin

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 50 mg/mL (155.13 mM)

Observed Molecular Weight:
322.31

Product Description

Dynasore is an inhibitor of the GTPase activity of **dynamin** with an **IC_{50}** of 15 μM.

IC50 & Target: IC50: 15 μM (GTPase activity of dynamin1 and 2)[1]

In Vitro: Dynasore interferes with the GTPase activity of dynamin1, dynamin2, and Drp1, the mitochondrial dynamin, but not of other small GTPases. Dynasore acts as a potent inhibitor of endocytic pathways known to depend on dynamin by rapidly blocking

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

coated vesicle formation within seconds of dynasore addition. Two types of coated pit intermediates accumulate during dynasore treatment, g-shaped, half formed pits and O-shaped, fully formed pits, captured while pinching off[1]. Dynasore inhibits HSV-1 and HSV-2 infection of human epithelial and neuronal cells, including primary genital tract cells and human fetal neurons and astrocytes. Dynasore reduces the number of viral capsids reaching the nuclear pore if added at the time of viral entry and that, when added as late as 8 h postentry, dynasore blocks the transport of newly synthesized viral proteins from the nucleus to the cytosol[2]. Dynasore prevents ischemia/reperfusion induced elevation of left ventricular end diastolic pressure. Dynasore also decreases cardiac troponin I efflux during reperfusion and reduces infarct size. In cultured adult mouse cardiomyocytes subjected to oxidative stress, dynasore increases cardiomyocyte survival and viability[3].

In Vivo: Dynasore ameliorates the motor dysfunction greatly at 3, 7, and 10 days after SCI in rats. Dynasore significantly enhances motor function which may be by inhibiting the activation of neuronal mitochondrial apoptotic pathway and astrocytic proliferation in rats after SCI[4].