

OctMAB

货号: O3015

储存条件: 粉末-20°C可保存3年; 液体-80°C可保存12月。

产品描述

The endocytic protein dynamin II (dynII) is a 100-kDa GTPase enzyme best known for its participation in cell cycle progression and role in centrosome cohesion and cytokinesis. Octadecyltrimethyl ammonium bromide (OctMAB) is a novel inhibitor of dynII GTPase activity with IC_{50} value of $4.35 \pm 2.42 \mu M$. It also inhibits dynI GTPase activity with IC_{50} value of $0.92 \pm 0.13 \mu M$. HeLa, H460, and SW480 cancer cells were treated with various concentrations of OctMAB for 7 d. Antiproliferative effect of OctMAB in these cells with a 50% reduction in colony formation was confirmed at concentration of $\sim 0.5 \mu M$ indicating OctMAB inhibited cell proliferation and reduce viability in a range of cancer cells. Asynchronously growing HeLa cells were treated for 48 h with OctMAB. Consistent with its effect on cell viability, it increased the sub- G_1 (<2N DNA content) population, indicating apoptosis. G_1 and S phase populations decreased, whereas the population of cells containing 4N DNA content (G_2 -M) increased. Therefore, OctMAB disrupted cell cycle progression and caused cytokinesis failure.

作用机制

OctMAB inhibits dynamin GTPase activity by disrupting the PH (pleckstrin homology) domain-phospholipid interaction.

产品信息

CAS号	1120-02-1	
分子式	C ₂₁ H ₄₆ BrN	
分子量	392.50	
溶解度	DMSO	11.0 mg/mL (28.0 mM)

