

MitMAB

货号: M2971

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. Myristyl trimethyl ammonium bromide (MitMAB) is a novel inhibitor of dynII GTPase activity with IC_{50} value of $8.4 \pm 5.79 \mu M$. It also inhibits dynI GTPase activity with IC_{50} value of $2.26 \pm 0.53 \mu M$. HeLa, H460, and SW480 cancer cells were treated with various concentrations of MitMAB for 7 d. Antiproliferative effect of MitMAB in these cells with a 50% reduction in colony formation was confined at concentration of $\sim 0.5 \mu M$ indicating MitMAB inhibited cell proliferation and reduce viability in a range of cancer cells. Asynchronously growing HeLa cells were treated for 48 h with MitMAB. 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, MitMAB disrupted cell cycle progression and caused cytokinesis failure.

作用机制

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

产品信息

CAS 号	1119-97-7
分子式	C17H38BrN
分子量	336.39
别名	Tetradecyltrimethylammonium bromide

