For Research Use Only

PF-04929113 Mesylate

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Catalog Number: CM04656

产品信息

Catalog Number:
CM04656

CAS号:
1173111-67-5

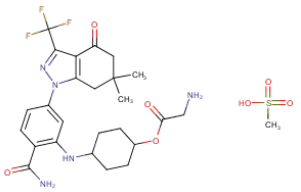
分子式:
$C_{26}H_{34}F_3N_5O_7S$

主要靶点:
HER|HSP

主要通路:
细胞骨架|代谢|血管生成|蛋白酪氨酸激酶|JAK/STAT 信号通路

分子量:
617.63

溶解度:
DMSO:27.5 mg/mL (44.52 mM)



靶点活性

HSP90:41 nM(Kd)|HER2:37?nM

体外活性

PF-04929113 在AU565细胞中有效抑制Her2（IC50：5±1 nM）和p-ERK稳定性（IC50：11±3 nM），抑制p-S6（IC50：61±22 nM）。同样，在A375细胞中，PF-04929113还能诱导Hsp70（IC50：13±3 nM）。PF-04929113（0.5、1、2、5及10 μM）浓度依赖性地降低细胞活力。此外，PF-04929113（1、3、5、7 μM）与HDAC抑制剂（PXD101、SAHA和TSA）等量组合，通过抑制PI3K/Akt/mTOR信号通路，协同诱导ATC细胞死亡。

体内活性

在HT-29人类结肠癌异种移植模型中，PF-04929113（50 mg/kg，p.o.）通过每周三次，持续三周的给药（qod × 3/2 × 3）后，强效抑制肿瘤生长。PF-04929113（20/40 mg/kg，p.o.）在小鼠中显著抑制多发性骨髓瘤（MM）的肿瘤血管生成和生长。

动物实验

PF-04929113 is preformulated in 1% microcrystalline cellulose/0.5% Tween80 in water.Female nude mice are 11 to 12 weeks old and have a body weight range of 18.7?30.5 g on Day 1 of the study. Xenografts are initiated from HT-29 human colon carcinoma tumors maintained by serial transplantation in athymic nude mice. Each test mouse receives a 1 mm3 HT-29 tumor fragment implanted subcutaneously in the right flank, and the growth of tumors is monitored as the average size approached 80?120 mm3. Fourteen days later, designated as Day 1 of the study, individual tumor volumes range from 63 to 126 mm3 and the animals are placed into eight groups, each consisting of 10 mice with group mean tumor volumes of 93.2?93.9 mm3. Micronized PF-04929113 is preformulated in 1% microcrystalline cellulose/0.5% Tween80 in water. The solutions are stored at 4°C during the study and homogenized just prior to dosing. Group 1 vehicle control mice receive D5W (5% dextrose) vehicle by oral gavage beginning on Day 1, every other day for three doses, followed by two days without treatment, for three cycles ((qod × 3)/2 × 3 weeks, a total of nine doses). Groups 2 to 5 animals receive 10 at 5, 10, 25, or 50 mg/kg on the same schedule as vehicle control group ((qod × 3)/2 × 3). Each treatment is administered in a volume of 0.2 mL per 20 g of body weight (10 mL/kg) and is scaled to the body weight of the animal. Tumors are measured twice weekly using calipers.

细胞实验

PF-04929113 is dissolved in DMSO.Cell viability is determined by the CCK-8 Assay Kit. Cells (5 × 103/100 μL) in each well on 96-well plates are incubated overnight and treated with the drugs (PF-04929113) for an additional 4 h at 37°C. Absorbance is measured at 450 nm using a spectrophotometer.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.