

Product Data Sheet

Product Name: SPA70
Cat. No.: GC49281

Chemical Properties

Cas. No. 931314-31-7

SMILES COC1=CC(N2N=NC(S(C3=CC=C(C(C)(C)C)C=C3)(=O)=O)=C2C)=C(OC)C=C1

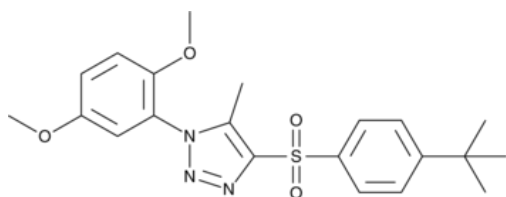
Formula $C_{21}H_{25}N_3O_4S$ M.Wt 415.5

Solubility Chloroform: 10 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

SPA70 is a pregnane X receptor (PXR) antagonist ($IC_{50} = 0.51 \mu M$).¹ It is selective for PXR over 10 additional nuclear receptors at concentrations greater than 5 μM , as well as over a panel of 384 kinases at 10 μM . SPA70 (0.1-10 μM) inhibits PXR activation induced by rifampicin in HEK293 cells expressing the human receptor. It also inhibits rifampicin-induced activity of the PXR target cytochrome P450 (CYP) isoform 3A4 (CYP3A4) in primary human hepatocytes. SPA70 (200 mg/kg) inhibits PXR agonist-induced CYP3A4-mediated metabolism of midazolam and paclitaxel in human PXR transgenic (hPXR-tg) mice.

1. Lin, W., Wang, Y.-M., Chai, S.C., et al. SPA70 is a potent antagonist of human pregnane X receptor. *Nat. Commun.* 8(1):741 (2017)

Caution: Product has not been fully validated for medical applications. For research use only.

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