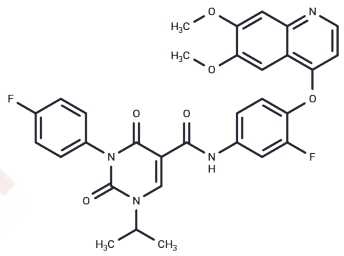
# Data Sheet (Cat.No.T4426)

TargetMol

CEP-40783

## Chemical Properties



CAS No. : 1437321-24-8

Formula: C31H26F2N4O6

Molecular Weight: 588.56

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

## Biological Description

| | |
|---|---|
| Description | CEP-40783 (RXDX-106) is an effective, specific and orally active AXL/c-Met inhibitor (IC50: 7/12 nM). It also inhibits MER and TYRO3 (IC50: 29/19 nM). |
| Targets(IC50) | c-Met/HGFR,TAM Receptor |
| In vitro | In AXL-transfected 293 gT cells, CEP-40783 is 27-fold more active compared to the recombinant enzyme (IC50: 0.26 nM). In GTL-16 cells, CEP-40783 also has superior activity against c-Met (IC50: 6 nM). The enhanced inhibitory activity of CEP-40783 in cells is attributed to its extended residence time on both c-Met and AXL, similar with a Type II mechanism. CEP-40783 shows high kinome selectivity against 298 kinases with an S90 of 0.04 (fraction of kinases showing >90% inhibition at 1 μM)[1]. |
| In vivo | CEP-40783 showed dose- and time-dependent inhibition of AXL phosphorylation using NCI-H1299 NSCL xenografts with ~80% target inhibition at 0.3 mg/kg 6 h post dose and complete target inhibition to >90% inhibition at 1 mg/kg between 6-24 h, while a 10 mg/kg po dose resulted in complete AXL inhibition up to 48 h post dosing. In AXL/NIH3T3 xenografts, 0.3 mg/kg po resulted in complete tumor regressions. CEP-40783 was also efficacious in reducing spontaneous lymph node and pulmonary metastatic tumor burden in the MDA-MB-231-luc and 4T1-luc orthotopic breast cancer models, respectively, at 10 and 30 mg/kg po. PK/PD evaluation of the c-Met activity of CEP-40783 (10, 30, 55 mg/kg po qdX5d) showed significant to complete inhibition of c-Met phosphorylation in GTL-16 gastric carcinoma xenografts. Efficacy studies in GTL-16 xenografts demonstrated significant anti-tumor efficacy (tumor stasis and regressions) at 10 and 30 mg/kg po. In EBC-1 NSCL xenografts, administration of CEP-40783 (3, 10 and 30 mg/kg, po qd) resulted in dose-related efficacy, with tumor stasis at 3 mg/kg, tumor regressions and >96% TGI at 10 mg/kg. |

## Solubility Information

| | |
|---|---|
| Solubility | H2O: Insoluble,<br>Ethanol: 2 mg/mL (3.4 mM),Sonication is recommended.<br>DMSO: 5.89 mg/mL (10 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.6991 mL | 8.4953 mL | 16.9906 mL |
| 5 mM | 0.3398 mL | 1.6991 mL | 3.3981 mL |
| 10 mM | 0.1699 mL | 0.8495 mL | 1.6991 mL |
| 50 mM | 0.034 mL | 0.1699 mL | 0.3398 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Miknyoczki S, Cheng M, Hudkins R, et al. Abstract C275: CEP-40783: A potent and selective AXL/c-Met inhibitor for use in breast, non-small cell lung (NSCLC), and pancreatic cancers.[J]. Molecular Cancer Therapeutics, 2013, 12 (11_Supplement):C275-C275.

Franovic A, Schairer A E, Uryu S, et al. 65 – RXDX-106 Is an orally-available, potent and selective TAM/MET inhibitor demonstrating preClinicalal efficacy in MET-dependent human malignancies[J]. European Journal of Cancer, 2016, 69:S28-S29.