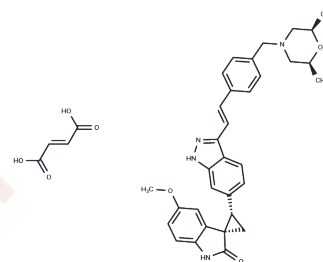


CFI-400945

## Chemical Properties

CAS No. : 1616420-30-4  
 Formula: C37H38N4O7  
 Molecular Weight: 650.72  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	CFI-400945 is an orally active, potent, and selective inhibitor of polo-like kinase 4.
Targets(IC50)	Others,PLK
In vitro	In an assay using recombinant human PLK4, CFI-400945 inhibited PLK4 (IC50: 2.8 ± 1.4 nM and Ki: 0.26 ± 0.1 nM in an ATP competitive manner). CFI-400945 inhibited autophosphorylation of PLK4 at serine 305 (EC50: 12.3 nM in cells overexpressing PLK4). CFI-400945 showed no significant inhibitory activity against other PLK family members (PLK1, PLK2, and PLK3 with the IC50s of > 50 μM). In transfected HCT116 cells with TRKA, TRKB, and Tie2/TEK, the EC50 values were 84 nM, 88 nM, and 117 nM, respectively. CFI-400945 inhibited the activity of AURKA and AURKB with the EC50 value of 510 nM and 102 nM. CFI-400945 (≥ 200 nM) decreased the mean centriole number in asynchronous U2OS cells. CFI-400945 inhibited a panel of breast cancer cell growth with the GI50 of 14-165 nM [1].
In vivo	In mice, the maximum tolerated dose (MTD) of CFI-400945 for once-daily oral administration was estimated to be 7.5-9.5 mg/kg [1].

## Solubility Information

Solubility	DMSO: 10 mg/mL (15.37 mM),Sonication is recommended. Ethanol: ≤12 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1 mg/mL (1.54 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.5368 mL	7.6838 mL	15.3676 mL
5 mM	0.3074 mL	1.5368 mL	3.0735 mL
10 mM	0.1537 mL	0.7684 mL	1.5368 mL
50 mM	0.0307 mL	0.1537 mL	0.3074 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481