Data Sheet (Cat.No.T10718L)



CCT241533 hydrochloride

Chemical Properties

CAS No.: 1431697-96-9

Formula: C23H28ClFN4O4

Molecular Weight: 478.95

Appearance: no data available

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

Biological Description

| Description | CCT241533 hydrochloride is an effective and selective ATP competitive inhibitor of CHK2 (Ki: 1.16 nM; IC50: 3 nM). | | |
|---------------|--|--|--|
| Targets(IC50) | Chk | | |
| In vitro | CCT241533 hydrochloride inhibits CHK2 (IC50: 3 nM) and shows minimal cross-reactivity against a panel of kinases at 1 μ M. X-ray crystallography confirms that CCT241533 binds to CHK2 in the ATP pocket. CCT241533 blocks CHK2 activity in human tumor cell lines in response to DNA damage. CCT241533 does not potentiate the cytotoxicity of a selection of genotoxic agents in several cell lines. However, CCT241533 significantly potentiates the cytotoxicity of two structurally distinct PARP inhibitors. Clear induction of the pS516 CHK2 signal is seen with a PARP inhibitor alone and this activation is abolished by CCT241533. In HT-29, HeLa, and MCF-7, the cytotoxicity of CCT241533 (GI50) is 1.7, 2.2, and 5.1 μ M, respectively [1]. CCT241533 hydrochloride is a potent CHK2 inhibitor (IC50: 3 nM), with selectivity (63-fold) over CHK1(IC50: 190 nM) and low hERG inhibition (IC50: 22 μ M) [2]. | | |

Solubility Information

| Solubility | DMSO: 100 mg/mL (208.79 mM), |
|------------|---|
| | (< 1 mg/ml refers to the product slightly soluble or insoluble) |

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Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|-----------|
| 1 mM | 2.0879 mL | 10.4395 mL | 20.879 mL |
| 5 mM | 0.4176 mL | 2.0879 mL | 4.1758 mL |
| 10 mM | 0.2088 mL | 1.044 mL | 2.0879 mL |
| 50 mM | 0.0418 mL | 0.2088 mL | 0.4176 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

Anderson VE, et al. CCT241533 is a potent and selective inhibitor of CHK2 that potentiates the cytotoxicity of PARP inhibitors. Cancer Res. 2011 Jan 15;71(2):463-72.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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