

## ARRY 520 hydrochloride

## Chemical Properties

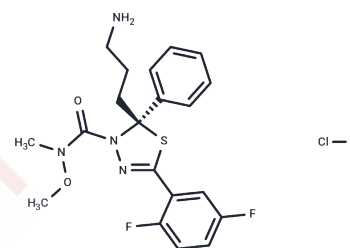
CAS No. : 1385020-40-5

Formula: C<sub>20</sub>H<sub>23</sub>ClF<sub>2</sub>N<sub>4</sub>O<sub>2</sub>S

Molecular Weight: 456.94

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

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	ARRY 520 hydrochloride is a kinesin spindle protein (KSP) inhibitor. ARRY 520 hydrochloride induces cell death by apoptosis and has potent anti-proliferative activity.
Targets(IC50)	Apoptosis, Kinesin, KSP
In vitro	ARRY 520 causes accumulation of cells in the G2/M phase of the cell cycle in a dose-dependent manner in HeLa cells[1]. ARRY 520 induces mitotic arrest in multiple cell lines and exhibits anti-proliferative against a broad range of human and rodent tumor cell lines, including a variety of leukemias and solid tumors[1]. ARRY 520 induces apoptosis in a dose-dependent manner in HeLa cells[1]. ARRY 520 potently induces cell cycle block and subsequent death in leukemic cells via the mitochondrial pathway and has potential to eradicate AML progenitor cells[2]. ARRY 520 is able to induce caspase-2 activation[3]. ARRY 520 is cytotoxic in Type II EOC cells[3].
In vivo	ARRY 520 has anti-tumor activity in vivo. ARRY 520 induced a decrease in tumor kinetics in a dose-dependent manner in female nude mice, EOC mice xenograft model[3].

## Solubility Information

Solubility	DMSO: 50 mg/mL (109.42 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.1885 mL	10.9424 mL	21.8847 mL
5 mM	0.4377 mL	2.1885 mL	4.3769 mL
10 mM	0.2188 mL	1.0942 mL	2.1885 mL
50 mM	0.0438 mL	0.2188 mL	0.4377 mL

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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.

### Reference

Christine Lemieux, et al. ARRY-520, a Novel, Highly Selective KSP Inhibitor with Potent Anti-Proliferative Activity. AACR Annual Meeting. 2007.

BZ Carter, et al. Inhibition of KSP by ARRY-520 Induces Cell Cycle Block and Cell Death via the Mitochondrial Pathway in AML Cells.

Ki Hyung Kim, et al. KSP inhibitor ARRY-520 as a substitute for Paclitaxel in Type I ovarian cancer cells. J Transl Med. 2009; 7: 63.

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