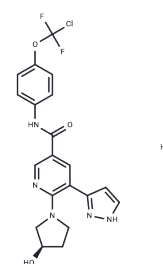


Asciminib hydrochloride

Chemical Properties

CAS No. :	2119669-71-3
Formula:	C ₂₀ H ₁₉ Cl ₂ F ₂ N ₅ O ₃
Molecular Weight:	486.3
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Asciminib hydrochloride is described as a "STAMP inhibitor," specifically targeting the ABL myristoyl pocket, Asciminib hydrochloride, marketed as Scemblix, are applied in research in Philadelphia chromosome-positive chronic myeloid leukemia (Ph+ CML) by binding to the allosteric site of wild-type ABL N-terminus, which is myristoylated, whereas the ABL fusion protein lacks this domain, enabling selective modulation of oncogenic signaling pathways and serving as a targeted therapeutic tool in hematologic cancer research.
Targets(IC50)	Bcr-Abl
In vitro	Pretreatment with Asciminib hydrochloride (0.5 μM) for 1 hour did not interfere with the DNA damage response signaling induced by 4-OH-Cy in MCF7 cells. Compared to the 4-OH-Cy treatment alone group, the Asciminib hydrochloride pretreatment group showed no significant differences in the expression levels of DNA damage marker proteins such as phosphorylated ATM (p-ATM), γH2AX, and phosphorylated p53 [2]. Parazacco spilurus subsp. spilurus [2].
In vivo	In animal experiments conducted on young mice (P6-P7 days old), a combined treatment of Asciminib hydrochloride (0.1-0.5 mg/kg) and cyclophosphamide (100 mg/kg) was administered via intraperitoneal injection to evaluate its protective effects on ovarian reserve. The experimental results demonstrated that Asciminib hydrochloride at a dose of 0.25 mg/kg significantly alleviated Cy-induced DNA damage stress signaling, manifested by the inhibition of TAp63 protein modification, reduced expression of DNA damage response markers such as γH2AX and phosphorylated DNA-PK, and decreased activation of cleaved PARP in oocytes. Additionally, Asciminib hydrochloride suppressed Akt phosphorylation in follicular reserve cells, indicating its regulatory role in Cy-triggered excessive follicular activation [2].

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble) DMSO: 80 mg/mL (164.51 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0563 mL	10.2817 mL	20.5634 mL
5 mM	0.4113 mL	2.0563 mL	4.1127 mL
10 mM	0.2056 mL	1.0282 mL	2.0563 mL
50 mM	0.0411 mL	0.2056 mL	0.4113 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.

Reference

Wylie AA, et al. The allosteric inhibitor ABL001 enables dual targeting of BCR-ABL1. *Nature*. 2017 Mar 30;543(7647):733-737.

Mattiello L, et al. Asciminib Mitigates DNA Damage Stress Signaling Induced by Cyclophosphamide in the Ovary. *Int J Mol Sci*. 2021 Jan 30;22(3):1395.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

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