

# **Product** Data Sheet

# SEL120-34A hydrochloride

Cat. No.: HY-111388B 
CAS No.: 1609452-30-3 
Molecular Formula:  $C_{15}H_{18}Br_2N_4$ .xHCl

Target: CDK

Pathway: Cell Cycle/DNA Damage

**Storage:** 4°C, sealed storage, away from moisture

\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

Br N Nh

x HCI

#### **SOLVENT & SOLUBILITY**

In Vitro	DMSO : 62.5 mg/mL (Need ultrasonic)
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (Infinity mM); Clear solution
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (Infinity mM); Clear solution
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.08 mg/mL (Infinity mM); Clear solution; Need warming

## **BIOLOGICAL ACTIVITY**

Description	SEL120-34A hydrochloride is a potent, selective, orally available, ATP-competitive CDK8 inhibitor, with IC <sub>50</sub> s of 4.4 nM and 10.4 nM for CDK8/CycC and CDK19/CycC, respectively, with antitumor activity.			
IC <sub>50</sub> & Target	CDK8/CycC 4.4 nM (IC <sub>50</sub> )	CDK19/CycC 10.4 nM (IC <sub>50</sub> )	CDK9/cycT 1070 nM (IC <sub>50</sub> )	
In Vitro	SEL120-34A hydrochloride is a selective, ATP-competitive CDK8 inhibitor, with IC $_{50}$ of 4.4 nM and 10.4 nM for CDK8/CycC and CDK19/CycC, respectively. SEL120-34A hydrochloride shows no obvious inhibition on CDK1, 2, 4, 6, 5, 7, and only weakly suppresses CDK9 (IC $_{50}$ , 1070 nM). SEL120-34A hydrochloride is active against a panel of AML cell lines (GI $_{50}$ <1 $\mu$ M), such as SKNO-1, KG-1, HEL-60, MOLM-16, MV-4-11, OciAML-2, MOLM-6 and OciAML-3 cells, consistent with the effective inhibition range of STAT1 S727 and STAT5 S726 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			
In Vivo	SEL120-34A (30, 60 mg/kg, p.o.) hydrochloride inhibits the growth of tumor in mice bearing MV4-11 cancer cells, and also arrests the growth of KG-1-derived tumors at 30 mg/kg via oral administration <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

### **CUSTOMER VALIDATION**

- Cell. 2021 Apr 15;184(8):2167-2182.e22.
- Nat Commun. 2019 Oct 18;10(1):4741.
- Int J Mol Sci. 2022 Feb 24;23(5):2493.
- Friedrich-Alexander-Universität Erlangen-Nürnberg. 2023 Jun 23.

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#### **REFERENCES**

[1]. Rzymski T, et al. SEL120-34A is a novel CDK8 inhibitor active in AML cells with high levels of serine phosphorylation of STAT1 and STAT5 transactivation domains. Oncotarget. 2017 May 16;8(20):33779-33795.

Caution: Product has not been fully validated for medical applications. For research use only.

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