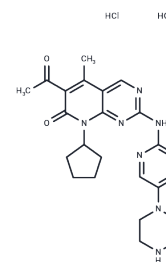


## Palbociclib hydrochloride

### Chemical Properties

CAS No. :	571189-11-2
Formula:	C <sub>24</sub> H <sub>31</sub> Cl <sub>2</sub> N <sub>7</sub> O <sub>2</sub>
Molecular Weight:	520.46
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



### Biological Description

Description	Palbociclib hydrochloride (pabociclib hydrochloride) is the salt form of Palbociclib, a selective and orally available CDK4 and CDK6 inhibitor with anti-tumor proliferative activity for use in breast and hepatocellular carcinoma.
Targets(IC50)	CDK
In vitro	<b>Methods:</b> Huh7 and skHep1 cells were treated with Palbociclib hydrochloride (0.1, 0.5 μM, 10 days) to test the reversibility of cell cycle arrest. <b>Results:</b> Palbociclib hydrochloride may induce irreversible cell cycle arrest in both cell lines, which may be dose-dependent. [2]
In vivo	<b>Methods:</b> Palbociclib hydrochloride (40 mg/kg, oral, 17 days) was used to treat NSG mice bearing IMR32 neuroblastoma cells to study its effect on tumor growth in mice. <b>Results:</b> Palbociclib hydrochloride effectively inhibited tumor growth in NSG mice and had no obvious toxicity to mice. [1]

### Solubility Information

Solubility	DMSO: 9.07 mg/mL (17.43 mM),Sonication is recommended. H <sub>2</sub> O: 1 mg/mL (1.92 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.9214 mL	9.6069 mL	19.2138 mL
5 mM	0.3843 mL	1.9214 mL	3.8428 mL
10 mM	0.1921 mL	0.9607 mL	1.9214 mL
50 mM	0.0384 mL	0.1921 mL	0.3843 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

Ferguson KM, et al. Palbociclib releases the latent differentiation capacity of neuroblastoma cells. *Dev Cell*. 2023 Oct 9;58(19):1967-1982.e8.

Bollard J, et al. Palbociclib (PD-0332991), a selective CDK4/6 inhibitor, restricts tumour growth in preclinical models of hepatocellular carcinoma. *Gut*. 2017 Jul;66(7):1286-1296.

**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