



## Product Information

Product ID P0244  
CAS No. 827022-32-2  
Chemical Name

Synonym PD-0332991

Formula  $C_{24}H_{29}N_7O_2 \cdot HCl$   
Formula Wt. 483.99

Melting Point

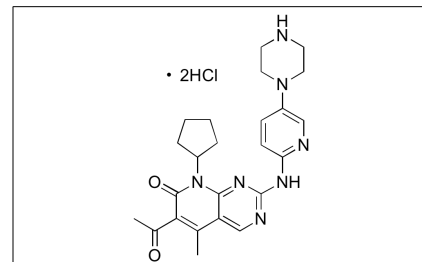
Purity  $\geq 99\%$

Solubility Soluble in DMSO and water

Store Temp  $-20^{\circ}C$

Ship Temp Ambient

**Description** Palbociclib is an orally bioavailable selective inhibitor of CDK4 and CDK6, kinases that regulate cell cycle progression. This compound exhibits anticancer chemotherapeutic activity in a variety of models, including renal cell carcinoma and ER+ breast cancer. Palbociclib inhibits retinoblastoma phosphorylation, preventing cells from progressing from the G1 phase to the S phase and inducing apoptosis.



**Bulk quantities available upon request**

Product ID	Size
P0244	1 mg
P0244	5 mg
P0244	25 mg

**References** Logan JE, Mostofizadeh N, Desai AJ, et al. PD-0332991, a Potent and Selective Inhibitor of Cyclin-dependent Kinase 4/6, Demonstrates Inhibition of Proliferation in Renal Cell Carcinoma at Nanomolar Concentrations and Molecular Markers Predict for Sensitivity. *Anticancer Res.* 2013 Aug;33(8):2997-3004. PMID: 23898052.

Roberts PJ, Bisi JE, Strum JC, et al. Multiple roles of cyclin-dependent kinase 4/6 inhibitors in cancer therapy. *J Natl Cancer Inst.* 2012 Mar 21;104(6):476-87. PMID: 22302033.

Rivadeneira DB, Mayhew CN, Thangavel C, et al. Proliferative suppression by CDK4/6 inhibition: complex function of the retinoblastoma pathway in liver tissue and hepatoma cells. *Gastroenterology.* 2010 May;138(5):1920-30. PMID: 20100483.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.