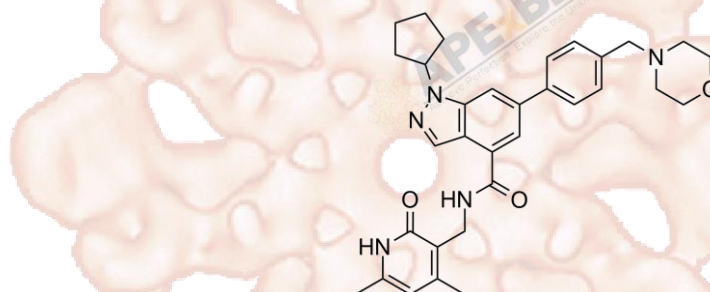


# Product Data Sheet

## EPZ005687

<b>Cat. No.:</b>	A4171
<b>CAS No.:</b>	1396772-26-1
<b>Formula:</b>	C32H37N5O3
<b>M.Wt:</b>	539.67
<b>Synonyms:</b>	EPZ 005687, EPZ-005687
<b>Target:</b>	Chromatin/Epigenetics
<b>Pathway:</b>	Histone Methyltransferase
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

insoluble in EtOH; insoluble in H<sub>2</sub>O;  $\geq 3.86$  mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	1.8530 mL	9.2649 mL	18.5298 mL
	<b>5 mM</b>	0.3706 mL	1.8530 mL	3.7060 mL
	<b>10 mM</b>	0.1853 mL	0.9265 mL	1.8530 mL

Please refer to the solubility information to select the appropriate solvent.

## Biological Activity

Shortsummary

EZH2 inhibitor, potent and selective

IC<sub>50</sub> & Target

24 nM (Ki) (EZH2)

In Vitro

### Cell Viability Assay

Cell Line: OCI-LY19, WSU-DLCL2 and Pfeiffer cells

Preparation method: The solubility of this compound in DMSO is limited. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

Reacting conditions: 0.011 ~ 8.3 μM; 11 days

	Applications:	EPZ005687 significantly inhibited the proliferation of WSU-DLCL2 and Pfeiffer cells, with minimal effects on the proliferation of OCI-LY19 cells.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Osteoarthritis (OA) mouse model
	Dosage form:	5.6 µM, 50 µL; intra-articular injection; at 7th, 15th and 30th days
	Applications:	Intra-articular injection of EPZ005687 delayed OA development in mice.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

1. Guangcheng Guo, Fang Wang, et al. "Long non-coding RNA PVT1 facilitates cell proliferation by epigenetically regulating FOXF1 in breast cancer." RSC Adv., 2018, 8, 2740.
2. Lin B, Coleman JH, et al. "Injury Induces Endogenous Reprogramming and Dedifferentiation of Neuronal Progenitors to Multipotency." Cell Stem Cell. 2017 Nov 20. pii:S1934-5909(17)30375-2. PMID:29174332

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## References

- [1]. Knutson SK, Wigle TJ, Warholik NM, Sneeringer CJ, Allain CJ, Klaus CR, Sacks JD, Raimondi A, Majer CR, Song J, Scott MP, Jin L, Smith JJ, Olhava EJ, Chesworth R, Moyer MP, Richon VM, Copeland RA, Keilhack H, Pollock RM, Kuntz KW. A selective inhibitor of EZH2 blocks H3K27 methylation and kills mutant lymphoma cells. Nat Chem Biol. 2012 Nov;8(11):890-6.
- [2]. Chen L, Wu Y, Wu Y, Wang Y, Sun L, Li F. The inhibition of EZH2 ameliorates osteoarthritis development through the Wnt/β-catenin pathway. Sci Rep. 2016 Aug 19;6:29176.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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## APExBIO Technology

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