

Product Data Sheet

TPBM

Cat. No.: HY-131404 CAS No.: 6466-43-9 Molecular Formula: $C_{15}H_{16}N_4O_2S$

Molecular Weight: 316.38

Target: Estrogen Receptor/ERR

Pathway: Vitamin D Related/Nuclear Receptor

Storage: Powder

4°C 2 years

3 years

In solvent -80°C 6 months

-20°C

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro DMSO: 100 mg/mL (316.08 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.1608 mL	15.8038 mL	31.6076 mL
	5 mM	0.6322 mL	3.1608 mL	6.3215 mL
	10 mM	0.3161 mL	1.5804 mL	3.1608 mL

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

In Vivo 1. Add each solvent one by one: 10% DMSO >> 90% corn oil

Solubility: ≥ 2.5 mg/mL (7.90 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	TPBM is a potent estrogen receptor α (ER α) inhibitor with an IC $_{50}$ value of 9 μ M for 17 β -estradiol (E2)-ER α . TPBM reduces E2·ER α recruitment to an endogenous estrogen-responsive gene. TPBM inhibits E2-dependent growth of ER α -positive cancer cells (IC $_{50}$ =5 μ M). TPBM is not toxic to cells and does not affect estrogen-independent cell growth [1].
IC ₅₀ & Target	IC ₅₀ : 9 μM (17β-estradiol (E2)-ER α) ^[1]

REFERENCES

[1]. Mao C, et al. A new small molecule inhibitor of estrogen receptor alpha binding to estrogen response elements blocks estrogen-dependent growth of cancer cells. J Biol Chem. 2008;283(19):12819-12830.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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Page 2 of 2 www.MedChemExpress.com