

Product data sheet



MedKoo Cat#: 206541 Name: PT2385 CAS#: 1672665-49-4 Chemical Formula: C ₁₇ H ₁₂ F ₃ NO ₄ S Exact Mass: 383.0439 Molecular Weight: 383.34	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

PT2385 is an orally active, small molecule inhibitor of hypoxia inducible factor (HIF)-2 α , with potential antineoplastic activity.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	50.0	130.43

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.61 mL	13.04 mL	26.09 mL
5 mM	0.52 mL	2.61 mL	5.22 mL
10 mM	0.26 mL	1.30 mL	2.61 mL
50 mM	0.05 mL	0.26 mL	0.52 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Colson A, Depoix CL, Lambert I, Leducq C, Bedin M, De Beukelaer M, Gatto L, Loriot A, Peers de Nieuwburgh M, Bouhna K, Baldin P, Hubinont C, Sonveaux P, Debiève F. Specific HIF-2 α (Hypoxia-Inducible Factor-2) Inhibitor PT2385 Mitigates Placental Dysfunction In Vitro and in a Rat Model of Preeclampsia (RUPP). Hypertension. 2023 May;80(5):1011-1023. doi: 10.1161/HYPERTENSIONAHA.122.20739. Epub 2023 Mar 6. PMID: 36876500.

In vivo study

- Shen J, Xu L, Li Y, Dong W, Cai J, Liu Y, Zhao H, Xu T, Holtz EM, Chang Y, Qiao T, Li K. Protective Effects of Hif2 Inhibitor PT-2385 on a Neurological Disorder Induced by Deficiency of Irp2. Front Neurosci. 2021 Oct 5;15:715222. doi: 10.3389/fnins.2021.715222. PMID: 34675764; PMCID: PMC8525628.
- Wallace EM, Rizzi JP, Han G, Wehn PM, Cao Z, Du X, Cheng T, Czerwinski RM, Dixon DD, Goggin BS, Grina JA, Halfmann MM, Maddie MA, Olive SR, Schlachter ST, Tan H, Wang B, Wang K, Xie S, Xu R, Yang H, Josey JA. A Small-Molecule Antagonist of HIF2 α Is Efficacious in Preclinical Models of Renal Cell Carcinoma. Cancer Res. 2016 Sep 15;76(18):5491-500. doi: 10.1158/0008-5472.CAN-16-0473. Epub 2016 Sep 6. PMID: 27635045.

7. Bioactivity

Biological target:

PT2385 is a selective HIF-2 α antagonist with luciferase EC₅₀ of 27 nM and no significant off-target activity.

Product data sheet



In vitro activity

This study investigated the benefits of using PT2385 to treat severe placental dysfunction. In vitro, RNA sequencing analysis and conventional techniques showed that PT2385 treated cytotrophoblast displayed an enhanced differentiation into syncytiotrophoblasts and normalized angiogenic factor secretion compared with vehicle-treated cells.

Reference: Hypertension. 2023 May;80(5):1011-1023. <https://pubmed.ncbi.nlm.nih.gov/36876500/>

In vivo activity

PT2385 specifically targeted HIF2 α , a key oncogenic driver in clear cell renal cell carcinoma, by blocking its dimerization with ARNT/HIF1 β . This inhibition led to the suppression of HIF2 α -dependent genes in tumor cells and resulted in dramatic tumor regressions when administered to tumor-bearing mice. PT2385 did not affect cardiovascular performance.

Reference: Cancer Res. 2016 Sep 15;76(18):5491-500. <https://pubmed.ncbi.nlm.nih.gov/27635045/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.