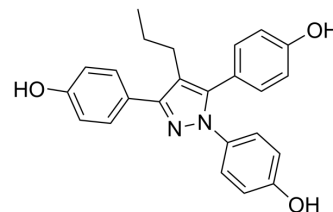


Propyl pyrazole triol

Cat. No.:	HY-100689		
CAS No.:	263717-53-9		
Molecular Formula:	C ₂₄ H ₂₂ N ₂ O ₃		
Molecular Weight:	386.44		
Target:	Estrogen Receptor/ERR		
Pathway:	Vitamin D Related/Nuclear Receptor		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (258.77 mM)
 * "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass	Preparing Stock Solutions		
			1 mg	5 mg	10 mg
1 mM			2.5877 mL	12.9386 mL	25.8772 mL
5 mM			0.5175 mL	2.5877 mL	5.1754 mL
10 mM			0.2588 mL	1.2939 mL	2.5877 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 10 mg/mL (25.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (6.47 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (6.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Propyl pyrazole triol (PPT) is a selective estrogen receptor alpha (ERα) agonist. The relative binding affinity of Propyl pyrazole triol for ERα (ERα: 49%) around 410 times higher compared with estrogen receptor beta (ERβ: 0.12%)^{[1][2]}.

IC₅₀ & Target

ERα

In Vitro

The EC₅₀ of Propyl pyrazole triol for the ERα-dependent response is 140 pM in ERα-U2OS-Luc cells^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cancer Lett. 2021 Feb 1;498:54-69.
- Int J Biol Sci. 2022; 18(5): 1961-1973.
- Ecotoxicol Environ Saf. 2023 May 23;259:115060.
- J Agric Food Chem. 2021 Nov 24.
- J Clin Endocrinol Metab. 2021 Feb 1;dgab020.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Influence of cellular ERalpha/ERbeta ratio on the ERalpha-agonist induced proliferation of human T47D breast cancer cells.

[2]. Stauffer SR, et al. Pyrazole ligands: structure-affinity/activity relationships and estrogen receptor-alpha-selective agonists. J Med Chem. 2000 Dec 28;43(26):4934-47.

Caution: Product has not been fully validated for medical applications. For research use only.

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