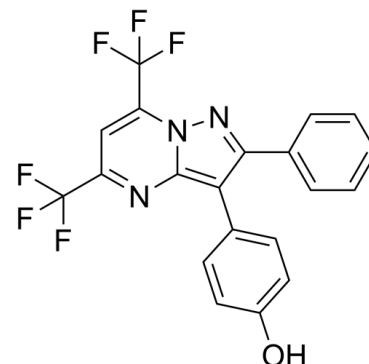


Data Sheet

Product Name:	PHTPP
Cat. No.:	CS-0027927
CAS No.:	805239-56-9
Molecular Formula:	C ₂₀ H ₁₁ F ₆ N ₃ O
Molecular Weight:	423.31
Target:	Estrogen Receptor/ERR
Pathway:	Others
Solubility:	DMSO : 25 mg/mL (59.06 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

PHTPP is a selective **estrogen receptor β (ER β)** antagonist with 36-fold selectivity over ER α ^[1]. IC₅₀ & Target: ER β ^[1] **In Vitro:** PHTPP is a selective ER β antagonist. PHTPP reduces FSH-mediated cAMP production by 80% (p<0.01) while it has no effect on basal cAMP^[1]. PHTPP (10⁻⁶ M) inhibits E2-stimulated ER β activity, but does not suppress E2-stimulated ER α activity. A high dose of PHTPP (10⁻⁶ M) slightly increases class 1 Igf1 mRNA expression, and facilitates the DPN-induced increase in class 1 Igf1 mRNA expression^[2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: ^[1]Cells are plated at a density of 3 to 4×10⁵ in 1 mL of medium per well in a 24-well plate for cell viability and cAMP analysis. Cells are cultured in Dulbecco's Modified Eagle Medium with **PHTPP (1 μ M)**, or ethanol (0.1%) as the vehicle. The incubator is set to an atmosphere of 5% CO₂ in air at 37°C, and cultures are allowed to acclimate for at least 24 h. The culture medium is then aspirated and replaced with serum-free DMEM/F12 containing 0.1 μ M androstenedione. The cells are collected for intracellular cAMP and to test cell viability^[1].

References:

[1]. Ogo Y, et al. IGF-1 gene expression is differentially regulated by estrogen receptors α and β in mouse endometrial stromal cells and ovarian granulosa cells. J Reprod Dev. 2014;60(3):216-23. Epub 2014 Mar 25.

[2]. Dennis R Compton, et al. Pyrazolo[1,5-a]pyrimidines: estrogen receptor ligands possessing estrogen receptor beta antagonist activity. J Med Chem. 2004 Nov 18;47(24):5872-93.

CAIndexNames:

Phenol, 4-[2-phenyl-5,7-bis(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-3-yl]-

SMILES:

OC1=CC=C(C2=C3N=C(C(F)(F)F)C=C(C(F)(F)F)N3N=C2C4=CC=CC=C4)C=C1

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

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