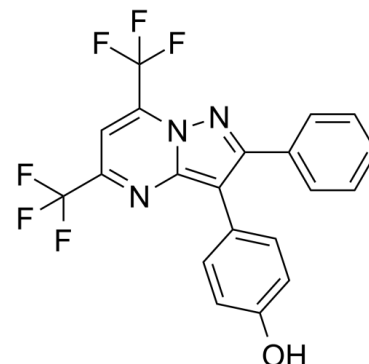


## Data Sheet

<b>Product Name:</b>	PHTPP
<b>Cat. No.:</b>	CS-0027927
<b>CAS No.:</b>	805239-56-9
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>11</sub> F <sub>6</sub> N <sub>3</sub> O
<b>Molecular Weight:</b>	423.31
<b>Target:</b>	Estrogen Receptor/ERR
<b>Pathway:</b>	Others
<b>Solubility:</b>	H <sub>2</sub> O : < 0.1 mg/mL (insoluble); DMSO : 25 mg/mL (59.06 mM); Need ultrasonic)



### BIOLOGICAL ACTIVITY:

PHTPP is a selective **ER $\beta$**  antagonist. IC<sub>50</sub> & Target: ER $\beta$ <sup>[1]</sup> **In Vitro:** PHTPP is a selective ER $\beta$  antagonist. PHTPP reduces FSH-mediated cAMP production by 80% (p<0.01) while it has no effect on basal cAMP<sup>[1]</sup>. PHTPP (10<sup>-6</sup> M) inhibits E2-stimulated ER $\beta$  activity, but does not suppress E2-stimulated ER $\alpha$  activity. A high dose of PHTPP (10<sup>-6</sup> M) slightly increases class 1 Igf1 mRNA expression, and facilitates the DPN-induced increase in class 1 Igf1 mRNA expression<sup>[2]</sup>.

### PROTOCOL (Extracted from published papers and Only for reference)

**Cell Assay:** <sup>[1]</sup> Cells are plated at a density of 3 to 4×10<sup>5</sup> 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  $\mu$ M), or ethanol (0.1%) as the vehicle. The incubator is set to an atmosphere of 5% CO<sub>2</sub> 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  $\mu$ M androstenedione. The cells are collected for intracellular cAMP and to test cell viability<sup>[1]</sup>.

### References:

[1]. Compton DR, 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.

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

### 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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