# **PRODUCT** INFORMATION



PHTPP

Item No. 16025

CAS Registry No.:	805239-56-9	HO
Formal Name:	4-[2-phenyl-5,7-	
	<i>bis</i> (trifluoromethyl)pyrazolo[1,5-a] pyrimidin-3-yl]-phenol	
MF:	$C_{20}H_{11}F_{6}N_{3}O$	
FW:	423.3	N CF <sub>3</sub>
Purity:	≥98%	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥2 years	ĊF <sub>3</sub>
Information represents	s the product specifications. Batch specific an	nalytical results are provided on each certificate of analysis.

# Laboratory Procedures

PHTPP is supplied as a crystalline solid. A stock solution may be made by dissolving the PHTPP in the solvent of choice, which should be purged with an inert gas. PHTPP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PHTPP in ethanol is approximately 30 mg/ml and approximately 50 mg/ml in DMSO and DMF.

PHTPP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PHTPP should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PHTPP has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

PHTPP is a pyrazolo[1,5-α]pyrimidine-based ligand that acts as a full antagonist of estrogen ERβ receptors with 36-fold selectivity over ERa.<sup>1</sup> It exhibits no significant agonism on ERa or ER $\beta$ .<sup>1</sup> This compound has been used to selectively target ER $\beta$  in the study of the opposing effects of hormone therapy on tumors expressing either ER subtype. At 100 pM, PHTPP has been found to enhance SKOV3 and OV2008 ovarian cancer cell growth in in vitro assays.<sup>2</sup>

# References

- 1. Compton, D.R., Sheng, S., Carlson, K.E., et al. Pyrazolo[1,5-a]pyrimidines: Estrogen receptor ligands possessing estrogen receptor  $\beta$  antagonist activity. J. Med. Chem. 47(24), 5872-5893 (2004).
- 2. Chan, K.K.L., Leung, T.H.Y., Chan, D.W., et al. Targeting estrogen receptor subtypes (ER $\alpha$  and ER $\beta$ ) with selective ER modulators in ovarian cancer. J. Endocrinol. 221(2), 325-336 (2014).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM