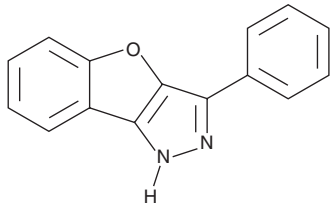
PRODUCT INFORMATION

GTP 14564

Item No. 17543

CAS Registry No.:	34823-86-4
Formal Name:	3-phenyl-1H-benzofuro[3,2-c] pyrazole
MF:	$C_{15}H_{10}N_2O$
FW:	234.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 248, 272, 304 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GTP 14564 is supplied as a crystalline solid. A stock solution may be made by dissolving the GTP 14564 in the solvent of choice, which should be purged with an inert gas. GTP 14564 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GTP 14564 in ethanol is approximately 1 mg and approximately30 mg/ml in DMSO and DMF.

GTP 14564 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GTP 14564 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GTP 14564 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GTP 14564 is an inhibitor of class III receptor tyrosine kinases (IC_{50}s = 0.3 µM for c-Fms, c-Kit, ITD-FLT3 and 1 µM for PDGFRβ).[1] It is without effect against a panel of non-receptor tyrosine and serine/threonine kinases.[1] GTP 14564 blocks the proliferation of leukemia cells stimulated with FLT3 ligand by preventing the activation of STAT5.[1,2]

References

1. Murata, K., Kumagai, H., Kawashima, T., *et al.* Selective cytotoxic mechanism of GTP-14564, a novel tyrosine kinase inhibitor in leukemia cells expressing a constitutively active Fms-like tyrosine kinase 3 (FLT3). *J. Bio. Chem.* **278(35)**, 32892-32898 (2003).
2. Yao, Q., Nishiuchi, R., Kitamura, T., *et al.* Human leukemias with mutated FLT3 kinase are synergistically sensitive to FLT3 and Hsp90 inhibitors: The key role of the STAT5 signal transduction pathway. *Leukemia* **19(9)**, 1605-1612 (2005).

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