

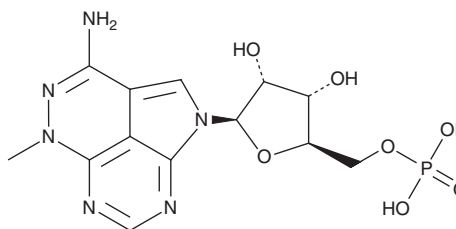
PRODUCT INFORMATION



Triciribine Phosphate

Item No. 37985

CAS Registry No.: 61966-08-3
Formal Name: 1,5-dihydro-5-methyl-1-(5-O-phosphono-β-D-ribofuranosyl)-1,4,5,6,8-pentaazaacenaphthylen-3-amine
Synonyms: TCN-P, Triciribine-5'-monophosphate, NSC 280594
MF: C₁₃H₁₇N₆O₇P
FW: 400.3
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Triciribine phosphate is supplied as a crystalline solid. Aqueous solutions of triciribine phosphate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of triciribine phosphate in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Triciribine phosphate is an Akt activation inhibitor and an active metabolite of the prodrug triciribine (Item No. 10010237).^{1,2} Upon entry into cells, triciribine is metabolized to triciribine phosphate by adenosine kinase (AK).² It binds to the Pleckstrin homology (PH) domain of Akt and prevents its recruitment to the plasma membrane in MDA-MB-468 cells.¹ Triciribine phosphate reduces the proliferation of A1847 and A2780 ovarian cancer cells (IC₅₀s = 1.6 and 18 μM, respectively).³ It inhibits HIV-1 reverse transcriptase activity in CEM-SS cells (IC₅₀ = 0.04 μM), as well as herpes simplex virus 1 (HSV-1) replication in BS-C-1 cells and human cytomegalovirus (CMV) plaque formation in HFF-1 IRR cells (IC₅₀s = 20 and 0.8 μM, respectively).⁴

References

1. Berndt, N., Yang, H., Tinczek, B., *et al.* The Akt activation inhibitor TCN-P inhibits Akt phosphorylation by binding to the PH domain of Akt and blocking its recruitment to the plasma membrane. *Cell Death Differ.* **17(11)**, 1795-1804 (2010).
2. Plagemann, P.G.W. Transport, phosphorylation, and toxicity of a tricyclic nucleoside in cultured Novikoff rat hepatoma cells and other cell lines and release of its monophosphate by the cells. *J. Natl. Cancer Inst.* **57(6)**, 1283-1295 (1976).
3. Behrens, B.C., Hamilton, T.C., Louie, K.G., *et al.* Activity of tricyclic nucleoside 5'-phosphate in model systems of human ovarian cancer. *Invest New Drugs* **4(4)**, 295-304 (1986).
4. Porcari, A.R., Ptak, R.G., Borysko, K.Z., *et al.* Deoxy sugar analogues of triciribine: Correlation of antiviral and antiproliferative activity with intracellular phosphorylation. *J. Med. Chem.* **43**, 2438-2448 (2000).

WARNING

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

SAFETY 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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