



LKT Laboratories, Inc.

Foscarnet Sodium

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID F5873

CAS No. 63585-09-1

Chemical Name

Synonym Phosphonoformic acid sodium salt, Trisodium phosphonoformate, Foscavir

Formula $\text{CNa}_3\text{O}_5\text{P}$

Formula Wt. 191.95

Melting Point

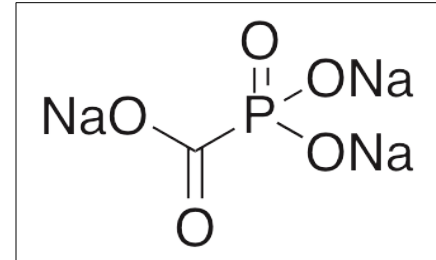
Purity $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

Description Foscarnet is an antiviral compound that inhibits reverse transcriptase of HIV-1 and DNA polymerase of other viruses, including CMV and HSV. Inhibition of these enzymes prevents DNA synthesis and viral replication. Foscarnet chelates with metal ions and also mimics the pyrophosphate leaving group in DNA polymerase, inducing a closed/un-translocated conformational state. Additionally, foscarnet inhibits type II inorganic phosphate (Pi) transporters in smooth muscle cells, inhibiting Ca^{2+} deposition and vascular calcification.



Bulk quantities available upon request

Product ID	Size
F5873	1 g
F5873	5 g
F5873	10 g

References Zahn KE, Tchesnokov EP, Götte M, et al. Phosphonoformic acid inhibits viral replication by trapping the closed form of the DNA polymerase. *J Biol Chem.* 2011 Jul 15;286(28):25246-55. PMID: 21566148.

Villa-Bellosta R, Sorribas V. Phosphonoformic acid prevents vascular smooth muscle cell calcification by inhibiting calcium-phosphate deposition. *Arterioscler Thromb Vasc Biol.* 2009 May;29(5):761-6. PMID: 19213941.

Marchand B, Tchesnokov EP, Götte M. The pyrophosphate analogue foscarnet traps the pre-translocational state of HIV-1 reverse transcriptase in a Brownian ratchet model of polymerase translocation. *J Biol Chem.* 2007 Feb 2;282(5):3337-46. PMID: 17145704.

Morfin F, Thouvenot D. Herpes simplex virus resistance to antiviral drugs. *J Clin Virol.* 2003 Jan;26(1):29-37. PMID: 12589832.

Hardy WD. Foscarnet treatment of acyclovir-resistant herpes simplex virus infection in patients with acquired immunodeficiency syndrome: preliminary results of a controlled, randomized, regimen-comparative trial. *Am J Med.* 1992 Feb 14;92(2A):30S-35S. PMID: 1531285.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.