

## PRODUCT DATA SHEET

Fostriecin Code: BIA-F1030

Pack sizes: 0.1 mg, 0.5 mg

Synonyms : Phosphotrienin, Antibiotic CI 920, Antibiotic CL 1565A, Antibiotic PD 110161,

NSC 339638

## Specifications

CAS # : 87860-39-7 Molecular Formula :  $C_{19}H_{26}NaO_9P$ 

Molecular Weight : 452.4

Source : Streptomyces sp. MST-AS5535

Appearance : White powder

Purity : > 99% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in water, optimal stability in aqueous buffered solutions at pH 6.5. NB:

hydrolysis of the phosphate ester will result from inappropriate storage.

## Application Notes

Fostriecin is the most fully characterised member of a family of phosphate esters of a triene antibiotic. The antitumor potential of fostriecin has attracted considerable interest, focused on its mode of action as a topoisomerase II inhibitor. Subsequent research has focused on this metabolite's selective inhibition of protein phosphatase PP2A.

## References

1. Fostriecin, an antitumor antibiotic with inhibitory activity against serine/threonine protein phosphatases types 1 (PP1) and 2A (PP2A), is highly selective for PP2A. Walsh A.H. et al. *FEBS Lett.* **1997**, 416, 230.

2. Chromosome condensation induced by fostriecin does not require p34cdc2 kinase activity and histone H1 hyperphosphorylation, but is associated with enhanced histone H2A and H3 phosphorylation. Guo X.W. et al. *EMBO J.* **1995**, 14, 976.

3. Antitumor drug fostriecin inhibits the mitotic entry checkpoint and protein phosphatases 1 and 2A. Roberge M. et al. *Cancer Res.* **1994**, 54, 6115.