



PRODUCT DATA SHEET

Product: Fostriecin

Cat. No.: AP-006 (10 µg)

Chemical Name:

2H-Pyran-2-one, 5,6-dihydro-6-[3,6, 13-trihydroxy-3methyl-4-(phosphonoxy)-1, 7, 9, 11-tridecatetraenyl]-, monosodium salt

Formula:

C₁₉H₂₆O₉PNa

Molecular Weight:

452.4

Appearance:

Colorless solid

Production:

Isolated from the *Streptomyces pulveraceus* ssp. *fostreus* by preparative flash, medium pressure and high performance liquid chromatography.

Purity:

≥98% (HPLC)

Format:

Packaged under argon gas in borsilicate glass vial with teflon-lined crimp closure.

Inhibitory Data:

Strong inhibitor of serine/threonine protein phosphatase type 2A (IC₅₀ 3.2 nM) and weak inhibitor of protein phosphatase type 1 (IC₅₀ 131 µM). Fostriecin has no apparent effect on PP2B. The binding site on PP2A is different than that for okadaic acid. An earlier report shows slightly less selectivity for PP2A. Fostriecin has also been reported to inhibit topoisomerase II.

Reported consequences of treating cells with fostriecin include override of the mitotic checkpoint, G2-M phase growth arrest associated with abnormal centrosome replication and formation of aberrant mitotic spindles, vimentin hyperphosphorylation and intermediate filament reorganization.

Solubility:

Soluble in water, methanol and ethanol.

Fostriecin is freely soluble in water. However, stability is reduced in the absence of sodium, and at pH values greater than neutral. It is recommended that fostriecin be dissolved in a sodium phosphate buffer with a pH not exceeding 7.5.

Storage and Stability:

Stable for approximately one year when stored at 4°C. If fostriecin is to be used in only small amounts over long periods of time, it should be dissolved in a minimal amount of phosphate buffer (eg. 5 mM, pH 6.8), aliquoted and stored at 4°C. The aliquots are stable for approximately one year. Fostriecin is known to decompose when frozen in liquid form. The aliquots can also be lyophilized for long term storage.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.