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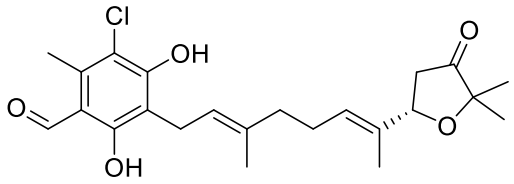
PRODUCT DATA SHEET

Ascofuranone

Code No.: **BIA-A2931**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : -

Specifications

CAS #	:	**38462-04-3**
Molecular Formula	:	**$C_{23}H_{29}ClO_5$**
Molecular Weight	:	**420.9**
Source	:	***Acremonium* sp.**
Appearance	:	**Off-white solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol, DMSO.**

Application Notes

Ascofuranone is an isoprenoid antibiotic originally isolated as a hypolipidemic substance from the phytopathogenic fungus, Ascochyta viciae by researchers at Chugai Pharmaceutical Co., Japan in 1973. Ascofuranone demonstrates antitumor activity against FM3A murine mammary, B16 melanoma and Lewis lung carcinomas. Ascofuranone increases splenic cytotoxicity and phagocytic activity of host animal cells. Ascofuranone targets c-Myc independent of p53. Ascofuranone also inhibits respiration, mitochondrial uptake and glycerol-3-phosphate dehydrogenase. Ascofuranone is active against trypanosomes.

References

1. Isolation and structure of ascofuranone and asofuranol, antibiotics with hypolipidemic activity. Sasaki H. et al. J Antibiot 1973, 26, 676.
2. Antitumor and antimetastatic activity of an antibiotic, ascofuranone, and activation of phagocytes. Magae J. et al. J Antibiot 1988, XLI, 959.
3. p53-independent induction of G1 arrest and p21WAF1/CIP1 expression by ascofuranone, an isoprenoid antibiotic, through downregulation of c-Myc. Jeong J-H. Mol Cancer Ther 2010, 9, 2102.
4. The efficacy of ascofuranone in a consecutive treatment on Trypanosoma brucei brucei in mice. Yabu Y. et al. Parasitol Int 2003, 52, 155.

For in vitro laboratory use only. Not for human or animal use.

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