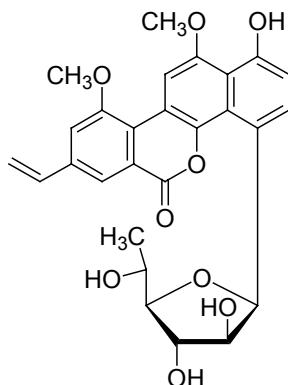


Gilvocarcin V

Code: **BIA-G1035**

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



Synonyms : **Anandimycin A, Toromycin B, Antibiotic 1072B**

Specifications

CAS #	: 77879-90-4
Molecular Formula	: C₂₇H₂₆O₉
Molecular Weight	: 494.5
Source	: <i>Streptomyces</i> sp. MST-AS5353
Appearance	: Yellow crystals
Purity	: > 95% by HPLC
Long Term Storage	: -20°C, protect from light
Solubility	: Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol.

Application Notes

Gilvocarcin V is the major analogue of a complex of C-glycoside antitumor actives isolated from a *Streptomyces* sp.. Gilvocarcin V contains a vinyl group in the 8-position and is the most potent analogue of the complex. It is thought to act as an inhibitor of the catalytic activity of human topoisomerase II. The metabolite displays potent antibacterial, antifungal, antiviral and antitumor activity. Recent research on the gilvocarcins suggests that they act as photoactivated crosslinkers of DNA to histones.

References

1. Histone H3 and heat shock protein GRP78 are selectively cross-linked to DNA by photoactivated gilvocarcin V in human fibroblasts. Matsumoto A. & Hanawalt P.C. *Cancer Res.* **2000**, 60, 3921.
2. Photoactivated gilvocarcin V induces DNA-protein crosslinking in genes for human ribosomal RNA and dihydrofolate reductase. Matsumoto A. et al. *Photochem. Photobiol.* **1994**, 60, 225.
3. Activation of antitumor agent gilvocarcins by visible light. Elespuru R.K. & Gonda S.K. *Science* **1984**, 223, 69.
4. Antitumor agents from *Streptomyces anandii*: gilvocarcins V, M and E. Balitz D.M. et al. *J. Antibiot.* **1981**, 34, 1544-1555.