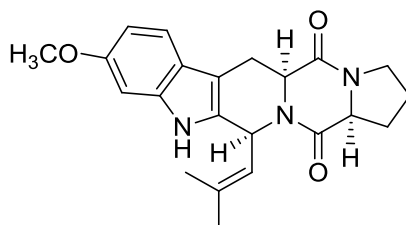


## Fumitremorgin C

Code No.: **BIA-F1031**

Pack sizes: **0.25 mg, 1 mg**



Synonyms :

### Specifications

|                   |   |
|-------------------|---|
| CAS #             | : 118974-02-0   |
| Molecular Formula | : C <sub>22</sub> H <sub>25</sub> N <sub>3</sub> O <sub>3</sub>     |
| Molecular Weight  | : 379.5   |
| Source            | : <i>Aspergillus fumigatus</i>                                      |
| Appearance        | : Tan Lyophilisate  |
| Purity            | : >95% by HPLC  |
| Long Term Storage | : -20°C   |
| Solubility        | : Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility. |

### Application Notes

Fumitremorgin C is a tremorgenic mycotoxin isolated from *Aspergillus fumigatus*. Recent research has recognised fumitremorgin C as a potent and specific inhibitor of the breast cancer resistance protein (BCRP/ABCG2) multidrug transporter. It reverses multidrug resistance mediated by BCRP and increases cytotoxicity of several anticancer agents in vitro.

### References

1. Potent and specific inhibition of the breast cancer resistance protein multidrug transporter in vitro and in mouse intestine by a novel analogue of fumitremorgin C. Allen J.D. et al., Mol. Cancer Ther. 2002, 1, 417.
2. Fumitremorgin C reverses multidrug resistance in cells transfected with the breast cancer resistance protein. Rabindran S.K. et al., Cancer Res. 2000, 60, 47.
3. Novel mammalian cell cycle inhibitors, tryprostatins A, B and other diketopiperazines produced by *Aspergillus fumigatus*. I. Taxonomy, fermentation, isolation and biological properties. Cui C.B. et al., J. Antibiot. 1996, 49, 527.
4. Mycotoxins produced by *Aspergillus fumigatus* species isolated from molded silage. Cole R.J. et al., J. Agric. Food Chem. 1977, 25, 826.