

PRODUCT DATA SHEET

Fumitremorgin C Code: BIA-F1031

Pack sizes: **0.25 mg**, **1.0 mg**

Synonyms : Tryptoquivaline

Specifications

CAS # : 118974-02-0 Molecular Formula : $C_{22}H_{25}N_3O_3$

Molecular Weight : 379.5

Source : Aspergillus fumigatus MST-FP1133

Appearance : Tan lyophilisate

Purity : > 95% by HPLC

Long Term Storage : +4°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

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

- 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.