

PRODUCT DATA SHEET

Pleuromutilin Code: BIA-P1204

Pack sizes: 25 mg, 100 mg

Synonyms : Drosophilin B, Antibiotic A 40104C

Specifications

CAS # : 125-65-5 Molecular Formula : $C_{22}H_{34}O_5$ Molecular Weight : 378.5

Source : Pleurotus sp. MST-FP2115A

Appearance : White solid

Purity : > 95% Long Term Storage : - 20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Pleuromutilin is a diterpene produced by several species of basidomycetes, notably the genus *Pleurotus*, discovered in 1951. Pleuromutilin is a potent and highly selective antibiotic active against a range of Gram positive bacteria with no cross resistance to existing antibiotic classes due to its unique mode of action. Pleuromutilin inhibits protein synthesis by binding to domain V of 23S rRNA and this has led to the development of many semi-synthetic analogues as new generation antibiotics, such as tiamulin and retapamulin.

References

- 1. Antibiotic substances from basidomycetes. VIII. *Pleurotus mutilus (Fr.) Sacc.* & *Pleurotus passeckerianus Pilat.* Kavanagh F. et al., Proc. Natl. Acad. Sci. USA 1951, 37, 570.
- 2. Pleuromutilin antibiotics. Hunt E., Drugs Future 2000, 25, 1163.
- 3. Pleuromutilins. Part 1. The indentification of novel mutilin 14-carbamates. Brooks G. et al., Bioorg. Med. Chem. 2001, 9, 1221.