

Product Name:	Pleuromutilin
Product Number:	P091
CAS Number:	125-65-5
Molecular Formula:	$C_{22}H_{34}O_5$
Molecular Weight:	378.5
Appearance:	White solid
Storage Conditions:	-20°C
Description:	<p>Pleuromutilin is a diterpene produced by several species of basidiomycete, notably the genus <i>Pleurotus</i>, 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.</p> <p>Pleuromutilin is soluble in ethanol, methanol, DMF and DMSO.</p>
Mechanism of Action:	<p>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.</p>
References:	<p>Antibiotic substances from basidiomycetes. VIII. <i>Pleurotus mutilus</i> (Fr.) Sacc. & <i>Pleurotus passeckerianus</i> Pilat. Kavanagh F. et al. , Proc. Natl. Acad. Sci. USA 1951, 37, 570.</p> <p>Pleuromutilin antibiotics. Hunt E., Drugs Future 2000, 25, 1163.</p> <p>Pleuromutilins. Part 1. The identification of novel mutilin 14-carbamates. Brooks G. et al. , Bioorg. Med. Chem. 2001, 9, 1221.</p>