

Product Name:	Cyclopiazonic acid
Product Number:	C192
CAS Number:	18172-33-3
Molecular Formula:	$C_{20}H_{20}N_2O_3$
Molecular Weight:	336.4
Appearance:	Off-white powder
Storage Conditions:	-20°C
Description:	<p>Cyclopiazonic acid is a tremorigenic indole produced by several species of <i>Aspergillus</i> and <i>Penicillium</i>. Cyclopiazonic acid is a highly specific inhibitor of calcium ATPase of sarcoplasmic reticulum, altering calcium homeostasis and ATP-dependent calcium transport and resulting in the release of intracellular stored Ca^{2+} without increasing IP3.</p> <p>Cyclopiazonic acid is soluble in ethanol, methanol, DMF and DMSO.</p>
Mechanism of Action:	<p>Cyclopiazonic acid is a highly specific inhibitor of calcium ATPase of sarcoplasmic reticulum, altering calcium homeostasis and ATP-dependent calcium transport and resulting in the release of intracellular stored Ca^{2+} without increasing IP3.</p>
References:	<p>The isolation and structure of cyclopiazonic acid, a toxic metabolite of <i>Penicillium cyclopium</i> Westling. Holzapfel C. W. Tetrahedron 1968, 24, 2101.</p> <p>Cyclopiazonic acid and related toxins. Holzapfel C. W. In A. Ciegler, S. Kadis and S. J. Ajl (ed.) Microbial toxins, vol. VI. Academic Press Inc., New York. 1971, 435.</p> <p>Isolation of cyclopiazonic acid, cyclopiazonic acid imine and bissecodehydrocyclopiazonic acid from the cultures of <i>Aspergillus versicolor</i> (Vuill.) Tiraboshi. Ohmono S. et al. J. Agric. Chem.Soc. 1973, 47, 57.</p> <p>The acute toxicity of the mycotoxin cyclopiazonic acid to rats. Purchase I. F. H. Toxicol. Appl. Pharmacol. 1971, 18, 114.</p> <p>Cyclopiazonic acid is a specific inhibitor of the Ca^{2+}-ATPase of sarcoplasmic reticulum. Seidler N. W. et al. J. Biol. Chem. 1989, 264, 17816.</p>