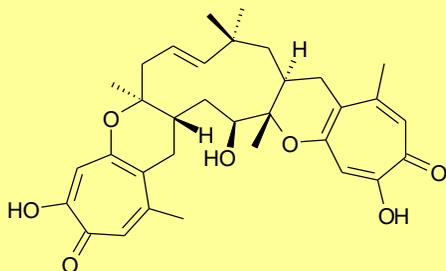


# Pycnidione

Cat.# BLK-1660

## Structure

**Origin:** Coniochaeta sp.**CAS Registry Number:** 149064-34-6**Appearance:** off white solid**Molecular Formula/ Weight:** C<sub>33</sub>H<sub>40</sub>O<sub>7</sub>=548.68**Purity:** >95.0% by HPLC**Solubility:** Sol. in 1mg/ml ethanol, methanol, DMSO

### Background Information:

Pycnidione is a fungal bistropolone originally isolated from a *Phoma* species and structurally characterized by spectroscopic analysis and X-ray crystallography<sup>1</sup>). It was identified as an inhibitor of the metalloendoproteinase stromelysin and later shown to exert potent antiproliferative activity against A549 human lung cancer cells ( $GI_{50} \approx 9.3$  nM), inducing G1-phase arrest and apoptosis<sup>2</sup>). Recent synthetic and computational studies have revised the stereochemistry of the pycnidione subclass and advanced understanding of sesquiterpene–tropolone biosynthesis<sup>3</sup>).

### Handling and Storage:

Store at -20°C.

### References:

1. Tetrahedron 1993, 49, 2139–2144.
2. Chem. Biol. Interact. 2012, 197, 23–30.
3. J. Am. Chem. Soc. 2021, 143, 6006–6017.

*Manufactured with Cortesy strain from The Kitasato Institute.*