

Diterpene aglycon, sordarin, contains a tetracyclic core with norbornene framework

β -glycoside linkage

No synthesis reported for sordarin

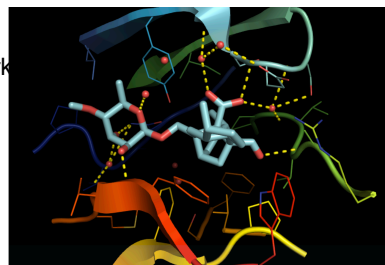
Two syntheses reported for sordarin

Chiba S., Kitamura M., Narasaka K.
Chem. Lett. **2004**, 33, 942
J. Am. Chem. Soc. **2006**, 128, 6931

Isolated in 1971 from the fungus *Sordaria araneosa*

Forms a stable complex with the fungal elongation factor 2 (EF-2) during of translation

Potent *in vitro* antifungal activity against several fungi such as *Candida albicans*

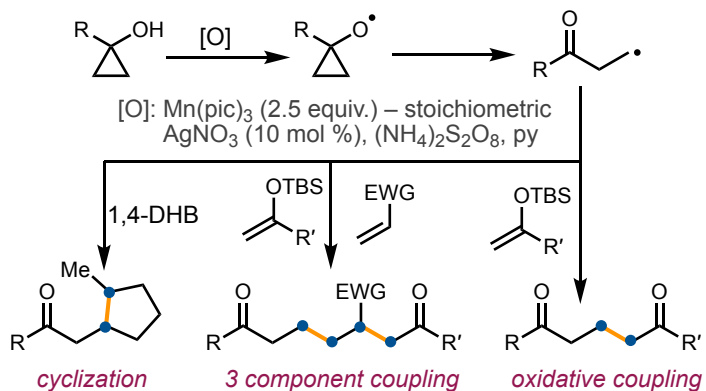


X-Ray structure of sordarin with eEF-2

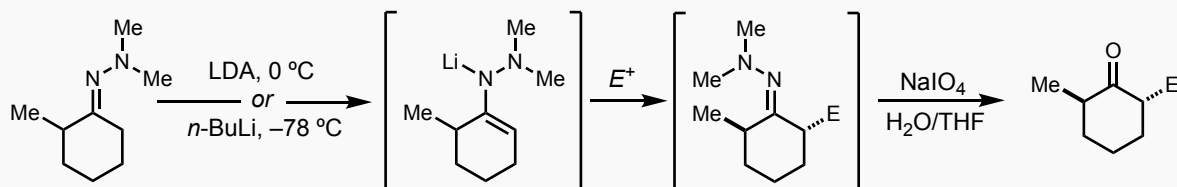
Wu, Yibiao; Dockendorff, Chris (2018): Synthesis of a Novel Bicyclic Scaffold Inspired by the Antifungal Natural Product Sordarin. ChemRxiv. Preprint.

1. Radical fragmentation

Narasaka *Chem. Lett.* **2006**, 35, 18



2. α -Lithiated hydrazones



in 95–100% from ketone

Corey*, *Enders Tetrahedron Lett.* **1976**, 17, 3

- lack of side reaction
- stability at 25 °C
- higher reactivity
- high regioselectivity
- unique stereoselectivity
- only monosubstitution

3. Annulation

