Inhibitor of Hedgehog signaling (IC_{50} = 0.5-0.7 \mu M). Binds directly to Smoothened (Smo)^1. Inhibits the response of target tissues to Sonic hedgehog signaling^2. Induces COX-2 overexpression in human erythroleukemia cells^3.

1) Cooper et al. (1998), *Teratogen-mediated inhibition of target tissue response to Shh signaling*; *Science*, **280** 1603

2) Mistretta et al. (2003), *Cyclopamine and jervine in embryonic rat tongue cultures demonstrate a role for Shh signaling in taste papilla development and patterning: fungiform papillae double in number and form in novel locations in dorsal lingual epithelium*; *Dev. Biol.*, **254** 1

3) Ghezale et al. (2013), *Cyclopamine and jervine induce COX-2 overexpression in human erythroleukemia cells but only cyclopamine has a pro-apoptotic effect*; *Exp. Cell Res.*, **319** 1043

**PHYSICAL DATA**

Molecular Weight: 425.62  
Molecular Formula: C_{27}H_{39}NO_{3}  
Purity: 98% by TLC  
NMR: (Conforms)  
Solubility: DMSO (up to 5 mg/ml), DMF (up to 6 mg/ml), or Ethanol (up to 20 mg/ml)  
Physical Description: White solid  
Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO, DMF or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.