

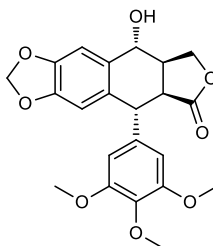


Catalog # 10-2189
Picropodophyllotoxin

CAS# 477-47-4

(5*R*,5*aS*,8*aR*,9*R*)-5,8,8*a*,9-Tetrahydro-9-hydroxy-5-(3,4,5-trimethoxyphenyl)-furo[3',4':6,7]naphtho[2,3-*d*]-1,3-dioxol-6(5*aH*)-one

Lot # X101814



Potent and selective inhibitor of insulin-like growth factor 1 receptor (IGF1R) which is non-competitive with ATP.¹ Displays no activity at IR, EGFR, FGFR or PDGFR. Inhibits IGF1R autophosphorylation IC₅₀ ~ 1 nM.¹ Displays antiproliferative activity in numerous tumor cell lines, IC₅₀ = 0.05 - 15 μ M.² Exhibits antiangiogenic activity.³ Attenuates intimal hyperplasia after vascular injury.⁴ Active *in vivo*.

- 1) Girnita *et al.* (2004), *Cyclolignans as inhibitors of the insulin-like growth factor-1 receptor and malignant cell growth*; Cancer Res., **64** 236
- 2) Girnita *et al.* (2006), *The insulin-like growth factor-I receptor inhibitor picropodophyllin causes tumor regression and attenuates mechanisms involved in invasion of ival melanoma cells*; Clin. Cancer Res., **12** 1383
- 3) Menu *et al.* (2007), *Targeting the IGF-1R using picropodophyllin in therapeutical 5T2MM mouse model of multiple myeloma: beneficial effects on tumor growth, angiogenesis, bone disease and survival*; Int. J. Cancer, **121** 1857
- 4) Razuvaev *et al.* (2007), *The cyclolignan picropodophyllin attenuates intimal hyperplasia after rat carotid balloon injury by blocking insulin-like growth factor-1 receptor signaling*; J. Vasc. Surg., **46** 108

PHYSICAL DATA

Molecular Weight:	414.42
Molecular Formula:	C ₂₂ H ₂₂ O ₈
Purity:	>97% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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