

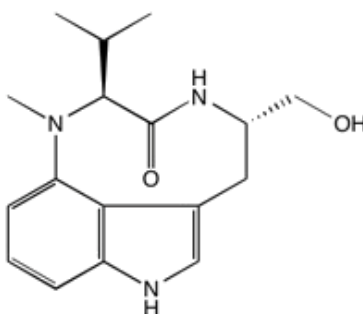
**Catalog # 10-2145**

**Indolactam V (-)**

CAS# 90365-57-4

(2S,5S)-1,2,4,5,6,8-Hexahydro-5-(hydroxymethyl)-1-methyl-2-(1-methylethyl)-3H-pyrrolo[4,3,2-gh]-1,4-benzodiazonin-3-one  
ILV

Lot # X107219



PKC activator acting at the phorbol ester binding site.<sup>1,2</sup> Directs differentiation of human and mouse ESCs to pancreatic cells.<sup>3</sup> May be used, along with other agents, to differentiate human iPS cells into glucose-responsive insulin-secreting progeny.<sup>4</sup> Increases regulator of G protein signaling 2 (RGS2) protein levels, a protein that regulates GPCR signaling.<sup>5</sup>

- 1) Fujiki et al. (1984), *Structure-activity studies on synthetic analogues (indolactams) of the tumor promoter teleocidin*; *Cancer Res.*, **44** 866
- 2) Heikkila and Ackerman (1989), *(-)-Indolactam V activates protein kinase C and induces changes in muscarinic receptor functions in SH-SY5Y human neuroblastoma cells*; *Biochem. Biophys. Res. Commun.*, **162** 1207
- 3) Chen et al. (2009), *A small molecule that directs differentiation of human ESCs into the pancreatic lineage*; *Nat. Chem. Biol.*, **5** 258
- 4) Thalava et al. (2011), *Indolactam V/GLP-1-mediated differentiation of human iPS cells into glucose-responsive insulin-secreting progeny*; *Gene Ther.*, **18** 283
- 5) Raveh (2014), *Identification of protein kinase C activation as a novel mechanism for RGS2 protein upregulation through phenotypic screening of natural product extracts*; *Mol. Pharmacol.*, **86** 406

**PHYSICAL DATA**

Molecular Weight:	301.38
Molecular Formula:	C <sub>17</sub> H <sub>23</sub> N <sub>3</sub> O <sub>2</sub>
Purity:	97% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 20 mg/ml) or in Ethanol (up to 5 mg/ml)
Physical Description:	Waxy lyophilized solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

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