

Catalog # 10-3779 UPF-1069

CAS# 1048371-03-4 5-(2-Oxo-3-phenylethoxy)-1(2H)-isoquinolinone Lot # X109466

A selective PARP-2 inhibitor (IC $_{50}$ =0.3 μ M and ~ 27-fold selective against PARP-1). Increases apoptosis in hippocampal slices but protects cortical cells in models of post-ischemic brain damage. Blocks the interaction between PARP-2 and FOXA1, attenuating androgen receptor-mediated gene expression and inhibiting androgen receptor-positive prostate cancer growth.

- 1) Pellicciari et al. (2008), On the way to selective PARP-2 inhibitors. Design, synthesis, and preliminary evaluation of a series of isoquinolinone derivatives; Chem. Med. Chem., **3** 914
- 2) Thorsell et al. (2017), Structural Basis for Potency and Promiscuity in Poly(ADP-ribose) Polymerase (PARP) and Tankyrase Inhibitors; J. Med. Chem., **60** 1262
- 3) Moroni et al. (2009), Selective PARP-2 inhibitors increase apoptosis in hippocampal slices but protect cortical cells in models of post-ischaemic brain damage; Br. J. Pharmacol., **157** 854
- 4) Gui et al. (2019), Selective targeting of PARP-2 inhibits androgen receptor signaling and prostate cancer growth through disruption of FOXA1 function; Proc. Natl. Acad. Sci. USA, **116** 14573

PHYSICAL DATA

Molecular Weight: 279.29
Molecular Formula: C₁₇H₁₃NO₃
Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 40 mg/ml)

Physical Description: Off-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 may be stored at -20°C for up to 3 months.

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