

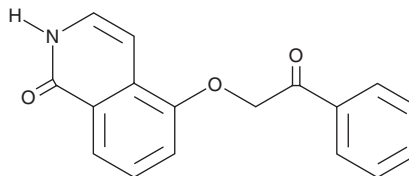
PRODUCT INFORMATION



UPF-1069

Item No. 17760

CAS Registry No.: 1048371-03-4
Formal Name: 5-(2-oxo-2-phenylethoxy)-1(2H)-isoquinolinone
Synonym: GKT237841
MF: C₁₇H₁₃NO₃
FW: 279.3
Purity: ≥98%
UV/Vis.: λ_{max}: 240, 280, 291, 330, 345 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

UPF-1069 is supplied as a crystalline solid. A stock solution may be made by dissolving the UPF-1069 in the solvent of choice, which should be purged with an inert gas. UPF-1069 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of UPF-1069 in ethanol is approximately 0.3 mg/ml and approximately 0.5 mg/ml in DMSO and DMF.

UPF-1069 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

The poly(ADP-ribose) polymerases (PARPs) form a family of enzymes with roles in DNA repair and apoptosis, particularly in response to reactive oxygen and nitrogen species. UPF-1069 is a PARP inhibitor that demonstrates a modest preference for PARP2 over PARP1 (IC₅₀s = 0.3 and 8 μM, respectively).¹ In rat models of post-ischemic brain damage, it has been shown to increase cell death in hippocampal slice cultures in a model characterized by loss of neurons through a caspase-dependent, apoptosis-like process but to be protective of cortical neurons in a model characterized by a necrosis-like process.²

References

1. Pellicciari, R., Camaioni, E., Costantino, G., *et al.* On the way to selective PARP-2 inhibitors. Design, synthesis, and preliminary evaluation of a series of isoquinolinone derivatives. *Chem. Med. Chem.* **3**(6), 914-923 (2008).
2. Moroni, F., Formentini, L., Gerace, E., *et al.* Selective PARP-2 inhibitors increase apoptosis in hippocampal slices but protect cortical cells in models of post-ischaemic brain damage. *Br. J. Pharmacol.* **157**(5), 854-862 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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