

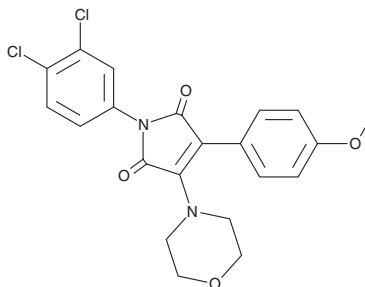
# PRODUCT INFORMATION



## RI-2

Item No. 18397

**CAS Registry No.:** 1417162-36-7  
**Formal Name:** 1-(3,4-dichlorophenyl)-3-(4-methoxyphenyl)-4-(4-morpholinyl)-1H-pyrrole-2,5-dione  
**MF:** C<sub>21</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub>  
**FW:** 433.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 264, 412 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

RI-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the RI-2 in the solvent of choice. RI-2 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of RI-2 in these solvents is approximately 2 and 10 mg/ml, respectively.

RI-2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RI-2 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RI-2 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

RI-2 is a reversible inhibitor of RAD51 (IC<sub>50</sub> = 44.2 μM), a protein that is central to the homologous recombination process initiated upon DNA double-strand breaks and is often overexpressed in a wide range of human cancer cell types.<sup>1</sup> At 150 μM, it has been shown to inhibit DNA repair and to sensitize cancer cells to cross-linking chemotherapy *in vitro*.<sup>1</sup>

### Reference

1. Budke, B., Kalin, J.H., Pawlowski, M., *et al.* An optimized RAD51 inhibitor that disrupts homologous recombination without requiring Michael acceptor reactivity. *J. Med. Chem.* **56**(1), 254-263 (2013).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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