

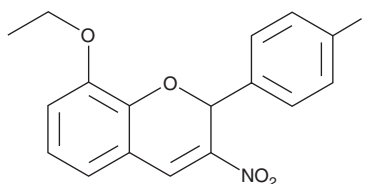
# PRODUCT INFORMATION



**S14161**

Item No. 14187

**CAS Registry No.:** 883046-50-2  
**Formal Name:** 8-ethoxy-2-(4-fluorophenyl)-3-nitro-2H-1-benzopyran  
**MF:** C<sub>17</sub>H<sub>14</sub>FNO<sub>4</sub>  
**FW:** 315.3  
**Purity:** ≥99%  
**Supplied as:** A 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

S14161 is supplied as a solid. A stock solution may be made by dissolving the S14161 in the solvent of choice, which should be purged with an inert gas. S14161 is soluble in the organic solvent DMSO.

## Description

D-Cyclins regulate the cell cycle by acting in a complex with cyclin dependent kinases (CDKs) to promote phosphorylation of the retinoblastoma protein and initiate cellular progression from the G<sub>1</sub> to the S phase. Cell cycle deregulation in many cancers often results from altered cyclin D/CDK activity. S14161 is a small molecule inhibitor of cyclins D1-D3 expression that inhibits phosphoinositide 3-kinase activity and arrests cells at the G<sub>0</sub>/G<sub>1</sub> phase in a dose-dependent manner (concentrations tested from 5-10 μM).<sup>1</sup> S14161 induces apoptosis in myeloma and leukemia cell lines (IC<sub>50</sub>s < 10 μM) but is less toxic to normal hematopoietic cells (IC<sub>20</sub> > 25 μM).<sup>1</sup> In a mouse model of leukemia, S14161 delayed tumor growth by up to 90% compared to controls at a dose of 100 mg/kg/day.<sup>1</sup>

## Reference

1. Mao, X., Cao, B., Wood, T.E., *et al.* A small-molecule inhibitor of D-cyclin transactivation displays preclinical efficacy in myeloma and leukemia *via* phosphoinositide 3-kinase pathway. *Blood* **117**(6), 1986-1997 (2011).

### 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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