

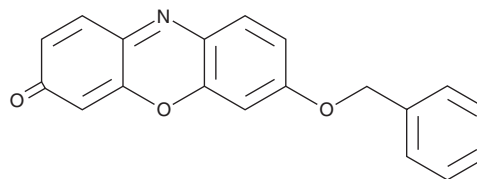
# PRODUCT INFORMATION



## Resorufin benzyl ether

Item No. 18077

**CAS Registry No.:** 87687-02-3  
**Formal Name:** 7-(phenylmethoxy)-3H-phenoxazin-3-one  
**Synonym:** Benzyloxyresorufin  
**MF:** C<sub>19</sub>H<sub>13</sub>NO<sub>3</sub>  
**FW:** 303.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 210, 250, 460 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

Resorufin benzyl ether is supplied as a crystalline solid. A stock solution may be made by dissolving the resorufin benzyl ether in the solvent of choice, which should be purged with an inert gas. Resorufin benzyl ether is soluble in the organic solvent dimethyl formamide at a concentration of approximately 0.3 mg/ml.

### Description

Resorufin benzyl ether is a fluorometric probe that acts as a substrate for cytochrome P450 (CYP)3A4.<sup>1</sup> It is typically used near its apparent K<sub>m</sub> value of 30 μM to screen the inhibition/activation potential of test compounds, to predict potential drug-drug interactions, or to monitor other CYP450 activities.<sup>1</sup> Upon enzyme cleavage, resorufin is released and displays excitation/emission maxima of 570/580 nm, respectively.<sup>2</sup>

### References

1. Stresser, D.M., Blanchard, A.P., Turner, S.D., *et al.* Substrate-dependent modulation of CYP3A4 catalytic activity: Analysis of 27 test compounds with four fluorometric substrates. *Drug Metab. Dispos.* **28(12)**, 1440-1448 (2000).
2. Hofmann, J. and Sernetz, M. Immobilized enzyme kinetics analyzed by flow-through microfluorimetry: Resorufin-β-D-galactopyranoside as a new fluorogenic substrate for β-galactosidase. *Analytica Chimica Acta* **163**, 67-72 (1984).

#### 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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