

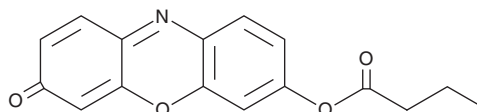
# PRODUCT INFORMATION



## Resorufin butyrate

Item No. 19592

**CAS Registry No.:** 15585-42-9  
**Formal Name:** 3-oxo-3H-phenoxazin-7-yl-butanoic acid ester  
**MF:** C<sub>16</sub>H<sub>13</sub>NO<sub>4</sub>  
**FW:** 283.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 214, 247, 355, 442 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 butyrate is supplied as a crystalline solid. A stock solution may be made by dissolving the resorufin butyrate in the solvent of choice, which should be purged with an inert gas. Resorufin butyrate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of resorufin butyrate in these solvents is approximately 0.1, 5, and 20 mg/ml, respectively.

Resorufin butyrate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, resorufin butyrate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Resorufin butyrate has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Resorufin butyrate is a fluorogenic substrate for triglyceride lipases.<sup>1</sup> It is also a substrate for cholinesterase.<sup>2</sup> Upon enzymatic cleavage by triglyceride lipases or cholinesterase, resorufin is released and can be used to quantify triglyceride lipase or cholinesterase activity. Resorufin displays excitation/emission maxima of 570/580 nm, respectively.<sup>3</sup>

### References

1. Lam, V., Henault, M., Khougaz, K., *et al.* Resorufin butyrate as a soluble and monomeric high-throughput substrate for a triglyceride lipase. *J. Biomol. Screen.* **17**(2), 245-251 (2012).
2. Guilbault, G.G. and Kramer, D.N. Resorufin butyrate and indoxyl acetate as fluorogenic substrates for cholinesterase. *Anal.Chem.* **37**, 120-123 (1965).
3. 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.

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