

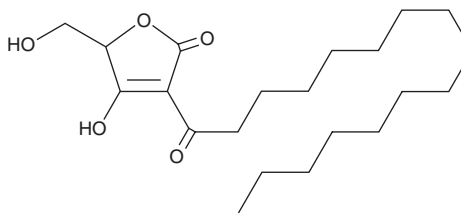
PRODUCT INFORMATION



TAN 1364B

Item No. 27964

CAS Registry No.: 154639-24-4
Formal Name: 4-hydroxy-5-(hydroxymethyl)-3-(1-oxohexadecyl)-2(5H)-furanone
Synonym: RK-682 (*rac*-1)
MF: C₂₁H₃₆O₅
FW: 368.5
Purity: ≥95%
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

TAN 1364B is supplied as a solid. A stock solution may be made by dissolving the TAN 1364B in the solvent of choice. TAN 1364B is soluble in the organic solvent methanol.

TAN 1364B 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

TAN 1364B is a protein tyrosine phosphatase (PTP) inhibitor and the racemic and monomeric form of RK-682 (Item No. 19450).¹ TAN 1364B inhibits the activity of the PTPs LMW-PTP, CDC25B, and PTP1B (IC₅₀s = 8.6, 12.4, and 0.7 μM, respectively), but the inhibitory activity against LMW-PTP and CDC25B is blocked in the presence of magnesium. TAN 1364B forms aggregates in solution and binds to both the PTP binding site and to protein surfaces.

Reference

1. Carneiro, V.M.T., Trivella, D.B.B., Scorsato, V., *et al.* Is RK-682 a promiscuous enzyme inhibitor? Synthesis and *in vitro* evaluation of protein tyrosine phosphatase inhibition of racemic RK-682 and analogues. *Eur. J. Med. Chem.* **97**, 42-54 (2015).

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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