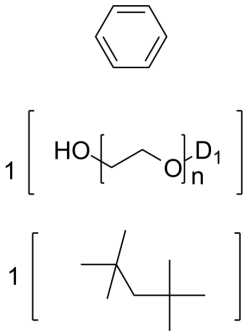
# (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114



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| **Cat. No.:** | HY-W134422 |
| **CAS No.:** | 9036-19-5 |
| **Molecular Formula:** | $(C_2H_4O)_nC_{14}H_{22}O$ |
| **Target:** | Biochemical Assay Reagents |
| **Pathway:** | Others |
| **Storage:** | Store at room temperature 3 years<br>In solvent -80°C 2 years<br>-20°C 1 year |

## SOLVENT & SOLUBILITY

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| **In Vitro** | DMSO : 100 mg/mL (Need ultrasonic) |
| **In Vivo** | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 2.5 mg/mL (Infinity mM); Clear solution<br>2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 2.5 mg/mL (Infinity mM); Clear solution<br>3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2.5 mg/mL (Infinity mM); Clear solution |

## BIOLOGICAL ACTIVITY

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| **Description** | (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 is a surfactant. (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 is used to solubilize membranes and whole cells. A solution of (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 is homogeneous at 0 degrees C but separates in an aqueous phase and a detergent phase above 20 degrees C. (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 can be used in phase separation studies[1][2]. |
| **In Vitro** | (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 (4%) is added to induce phase separation through cycles of cooling and heating[1].<br>A solution of (1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 is homogeneous at 0 degrees C but separates in an aqueous phase and a detergent phase above 20 degrees C[2].<br>(1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol X-114 is used to solubilize membranes and whole cells[2].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## CUSTOMER VALIDATION

- Cancer Cell. 2025 Jul 17:S1535-6108(25)00273-9.
- J Control Release. 2025 Nov 30:389:114488.

See more customer validations on www.MedChemExpress.com

## REFERENCES

[1]. Wu ZY, et al. Alistipes finegoldii augments the efficacy of immunotherapy against solid tumors. Cancer Cell. 2025 Sep 8;43(9):1714-1730.e12.

[2]. Bordier C. Phase separation of integral membrane proteins in Triton X-114 solution. J Biol Chem. 1981 Feb 25;256(4):1604-7.



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