

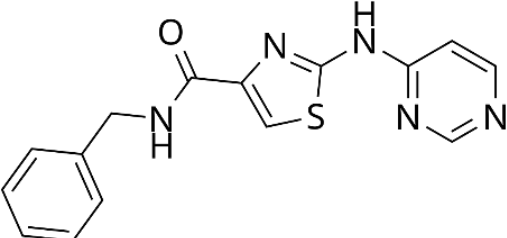


TrailBio[®] Thiazovivin User Instructions

Product Configurations

Catalog Number	Size	Quantity
TB34414	10 mg	1 vial

Product Description

Category	Specification
Product	Thiazovivin
Synonyms	ROCK inhibitor Thiazovivin; Tzv
CAS Number	1226056-71-8
MDL Number	MFCD16495823
Formula	C ₁₅ H ₁₃ N ₅ OS
Molecular Weight	311.36 g/mol
Storage (Solid)	-20 °C for up to 3 years or 4 °C for up to 2 years
Storage (Solution)	-80 °C for up to 2 years or -20 °C for up to 1 year
Shipping	Ambient temperature
Chemical Structure	

Quality & Analytical Specifications

Test Parameter	Specification
Solid Appearance (Color)	Off-white to light yellow
Purity	≥98%

Solubility

Solvent	Solubility
DMSO	≤30 mg/ml (96 mM)

Solution Preparation Guide

Amount	1 mM	5 mM	10 mM
1 mg	3.212 ml	0.642 ml	0.321 ml
10 mg	32.117 ml	6.423 ml	3.212 ml
50 mg	160.586 ml	32.117 ml	16.059 ml

Biological Description

Thiazovivin is a potent ROCK inhibitor that enhances human pluripotent stem cell survival by protecting cells from dissociation-induced apoptosis. It improves human pluripotent stem cell survival while maintaining pluripotency and is effective at 5-fold lower concentrations than the commonly used ROCK inhibitor Y-27632.

Associated Pathways & Applications

Category	Description
Associated Pathways	Cytoskeleton regulation; cell cycle/DNA damage; Wnt; TGF-β/Smad; caspase
Applications	Stem cell culture; post-thaw recovery; single-cell passaging; organoid culture; differentiation workflows; apoptosis/survival studies

Target & IC₅₀

Target	IC ₅₀
ROCK	0.5 μM

Notes

- When using DMSO-based stock solutions, maintain a final DMSO concentration of <0.5% in cell culture applications to minimize potential cellular toxicity, unless a higher concentration has been validated for the specific cell type.
 - Avoid repeated freeze-thaw cycles. Prepare single-use aliquots when possible.
 - Compound may collect on the vial cap or neck during shipping; centrifuge briefly before opening to bring contents to the bottom.
 - Certificate of Analysis (CoA) available upon request. Please contact support@trailbio.com.
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Cells

- TrailBio® Vascular Leptomeningeal Cells (Cat No. EC040003010)
- TrailBio® Hematopoietic Progenitor Cells (Cat No. ME060001020)
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- TrailBio® Cytarabine (Ara-C) (Cat No. TB47622)
- TrailBio® SB-431542 (Cat No. TB46416)
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