

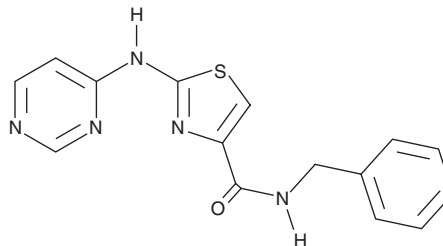
PRODUCT INFORMATION



Thiazovivin

Item No. 14245

CAS Registry No.: 1226056-71-8
Formal Name: N-(phenylmethyl)-2-(4-pyrimidinylamino)-4-thiazolecarboxamide
Synonym: Tzv
MF: C₁₅H₁₃N₅OS
FW: 311.4
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 261, 300 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

Thiazovivin is supplied as a crystalline solid. A stock solution may be made by dissolving the thiazovivin in the solvent of choice, which should be purged with an inert gas. Thiazovivin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of thiazovivin in these solvents is approximately 1, 14, and 10 mg/ml, respectively.

Thiazovivin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, thiazovivin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Thiazovivin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Thiazovivin is a selective, cell-permeable small molecule that inhibits ROCK activity at a concentration 2 μM.¹ It promotes the survival of induced pluripotent stem cells and improves their reprogramming efficiency from human fibroblasts more than 200 fold when used in combination with the ALK5 inhibitor SB 431542 (Item No. 13031) and the MEK inhibitor PD0325091 (Item No. 13034).²

References

1. Xu, Y., Zhu, X., Hahm, H.S., *et al.* Revealing a core signaling regulatory mechanism for pluripotent stem cell survival and self-renewal by small molecules. *Proc. Natl. Acad. Sci. USA* **107**(18), 8129-8134 (2010).
2. Lin, T., Ambasadhan, R., Yuan, X., *et al.* A chemical platform for improved induction of human iPSCs. *Nat. Methods* **6**(11), 805-808 (2009).

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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