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Produktinformation



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Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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Zuschläge

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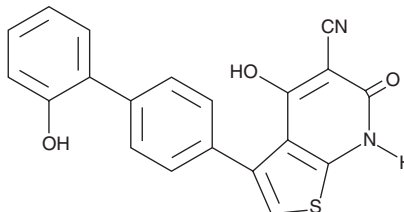
PRODUCT INFORMATION



A-769662

Item No. 11900

CAS Registry No.: 844499-71-4
Formal Name: 6,7-dihydro-4-hydroxy-3-(2'-hydroxy[1,1'-biphenyl]-4-yl)-6-oxo-thieno[2,3-b]pyridine-5-carbonitrile
MF: C₂₀H₁₂N₂O₃S
FW: 360.4
Purity: ≥98%
UV/Vis.: λ_{max}: 254, 296 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

A-769662 is supplied as a crystalline solid. A stock solution may be made by dissolving the A-769662 in the solvent of choice, which should be purged with an inert gas. A-769662 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of A-769662 in ethanol and DMF is approximately 0.5 mg/ml and approximately 20 mg/ml in DMSO.

A-769662 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, A-769662 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. A-769662 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

A-769662 is a small molecule thienopyridone that activates AMPK directly in cell-free assays (EC₅₀ = 116 nM) and intact cells by allosterically activating AMPK and inhibiting its dephosphorylation on Thr¹⁷².^{1,2} A-769662 specifically activates β1 subunit-containing AMPK heterotrimers, and its effects are independent of kinases upstream of AMPK.^{1,3} A-769662 has been used to stimulate CYP450-mediated fatty acid oxidation, inhibit adipocyte differentiation, explore glucose uptake in skeletal muscle, and promote endothelial cell survival during metabolic stress.³⁻⁷

References

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4. Zhou, Y., Wang, D., Zhu, Q., et al. *Biol. Pharm. Bull.* **32**(6), 993-998 (2009).
5. Hsu, M.-H., Savas, Ü., Lasker, J.M., et al. *J. Pharmacol. Exp. Ther.* **337**(1), 125-136 (2011).
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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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