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- Trockeneiszuschlag
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- Expressversand

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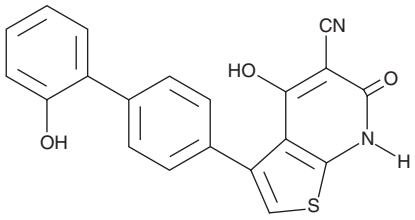
PRODUCT INFORMATION

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:	$C_{20}H_{12}N_2O_3S$
FW:	360.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 254, 296 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

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 (EC_{50} = 116 nM) and intact cells by allosterically activating AMPK and inhibiting its dephosphorylation on Thr^{172}.[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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