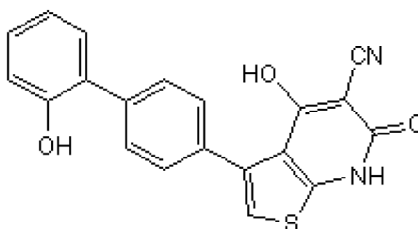


**Product Name:** A 769662 **Catalog No.:** 3336 **Batch No.:** 10  
**CAS Number:** 844499-71-4  
**IUPAC Name:** 6,7-Dihydro-4-hydroxy-3-(2'-hydroxy[1,1'-biphenyl]-4-yl)-6-oxo-thieno[2,3-b]pyridine-5-carbonitrile

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>S·¼H<sub>2</sub>O  
**Batch Molecular Weight:** 364.89  
**Physical Appearance:** Beige solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	65.83	3.45	7.68
Found	65.4	3.38	7.23

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

<b>Product Name:</b>	<b>A 769662</b>	<b>Catalog No.:</b>	<b>3336</b>	<b>10</b>
CAS Number:	844499-71-4			
IUPAC Name:	6,7-Dihydro-4-hydroxy-3-(2'-hydroxy[1,1'-biphenyl]-4-yl)-6-oxo-thieno[2,3-b]pyridine-5-carbonitrile			

**Description:**

A 769662 is a potent, reversible AMP-activated protein kinase (AMPK) activator (EC<sub>50</sub> = 0.8 μM) that displays selectivity towards β1 subunit-containing heterotrimers. Inhibits fatty acid synthesis (IC<sub>50</sub> = 3.2 μM) and decreases plasma glucose and triglyceride levels in vivo. Also inhibits proliferation of mesenchymal stem cells, and impedes reprogramming of mouse embryonic fibroblasts to iPSCs. Activates autophagy.

**Physical and Chemical Properties:**

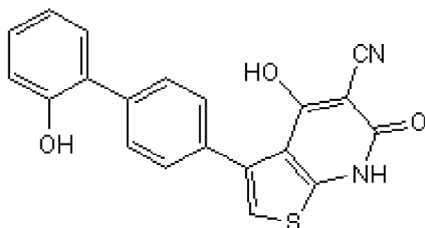
Batch Molecular Formula: C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>S.¼H<sub>2</sub>O

Batch Molecular Weight: 364.89

Physical Appearance: Beige solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Galluzzi et al** (2017) Pharmacological modulation of autophagy: therapeutic potential and persisting obstacles. *Nat.Rev.Drug.Discov.* PMID: 28529316.

**Duca et al** (2015) MetF. activates a duodenal Ampk-dependent pathway to lower hepatic glucose production in rats. *Nat.Med.* **21** 506. PMID: 25849133 .

**de Meester et al** (2014) Role of AMP-activated protein kinase in regulating hypoxic survival and proliferation of mesenchymal stem cells. *Cardiovasc.Res.* **101** 20. PMID: 24104879.

**Storage:** Store at +4°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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