A-769662

AMPK activator

A-769662 is a potent activator of AMP-activated protein kinase (AMPK), with an EC50 of 0.8 μ M in vitro. It specifically targets AMPK heterotrimers containing the $\beta1$ subunit.

Key features and applications include:

- **High Selectivity:** Selectively activates AMPK β1 subunit-containing heterotrimers.
- **Potency:** Demonstrates strong activation with an EC50 of 0.8 μM.
- Stimulate Fatty Acid Oxidation: Promotes fatty acid oxidation in various cell types.
- Inhibit Adipocyte Differentiation: Reduces differentiation of preadipocytes into adipocytes.
- Enhance Glucose Uptake: Increases glucose uptake in skeletal muscle cells.
- Promote Endothelial Cell Survival: Supports endothelial cell survival during metabolic stress.

Relevant disease states include:

- Type 2 Diabetes: Improves glucose homeostasis and reduces plasma glucose levels.
- Obesity: Inhibits adipogenesis, making it useful in obesity research.
- Metabolic Syndrome: Addresses key components of metabolic syndrome by activating AMPK.
- Cardiovascular Diseases: Enhances endothelial cell survival, which is beneficial in cardiovascular research.

Ordering Information

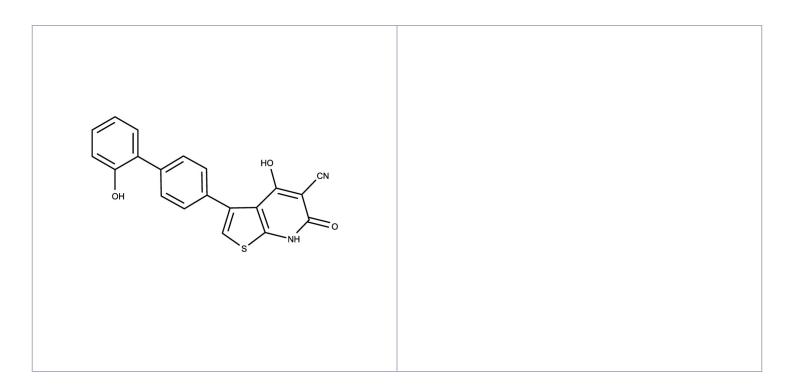
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· GMP format available

ENZ-CHM360-0025 25mg

Manuals, SDS & CofA

View Online »



Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended. Solutions in DMSO

or ethanol may be stored at -20°C for up to 3 months.

Handling Keep container tightly closed in a dry and well-ventilated place.

Short Term Storage -20°C

Long Term Storage -20°C

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name 4-Hydroxy-3-(2'-hydroxy-[1,1'-biphenyl]-4-yl)-6-oxo-6,7-dihydrothieno[2,3-b]pyridine-5-

carbonitrile

Appearance Beige solid.

CAS 844499-71-4

Couple Target AMPK

Couple Type Activator

Formula $C_{20}H_{12}N_2O_3S$

Identity Determined by NMR.

MW 360.39

Purity ≥98% (HPLC)

Solubility Soluble in DMSO (up to 30 mg/ml) or in ethanol (up to 5 mg/ml).



European Sales Office