
Product Data Sheet

Product Name: AMPK-IN-3

Cat. No.: GC67961

Chemical Properties

Cas. No. 2417674-27-0

Formula $C_{25}H_{33}N_5O_3$ M.Wt 451.56

Solubility Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

AMPK-IN-3 (compound 67) is a potent and selective **AMPK** inhibitor with **IC₅₀**s of 60.7, 107 and 3820 nM for **AMPK (α₂)**, **AMPK (α₁)** and **KDR**, respectively. AMPK-IN-3 inhibits **AMPK** does not affect cell viability or cause significant cytotoxicity in K562 cells. AMPK-IN-3 can be used in study of cancer^[1].

AMPK-IN-3 (100 nM) shows inhibition values for AMPK(α₂), FLT1, JAK1 JH2-pseudokinase and AMPK(α₁) for 64%, 43%, 41% and 29%, respectively^[1].

AMPK-IN-3 (0.195313, 0.78125, 3.125, 12.5, 50 μM; 2 h) decreases the level of p-ACC in K562 cells^[1].

AMPK-IN-3 (1-100 μM; 24, 48, 72 h) shows potent inhibition of cellular AMPK activity but not affect cell viability^[1].

Cell Viability Assay^[1]

Cell Line: K562 cells

Concentration: 0.195313, 0.78125, 3.125, 12.5, 50 μM

Caution: Product has not been fully validated for medical applications. For research use only.

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Incubation
Time: 2 h

Result: Decreased cellular levels of p-ACC(Ser79) in K562 cells.

Cell Viability Assay^[1]

Cell Line: K562 cells

Concentration: 1-100 μ M

Incubation
Time: 24, 48, 72 h

Result: Showed no measurable impact on cell viability in K562 cells cultured under hypoxic conditions for 72 hours.

[1]. Matheson CJ, et al. Substituted oxindol-3-ylidenes as AMP-activated protein kinase (AMPK) inhibitors. Eur J Med Chem. 2020 Jul 1;197:112316.

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