

Certificate of Analysis

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Product Name: RSVA 405

Catalog No.: 5138

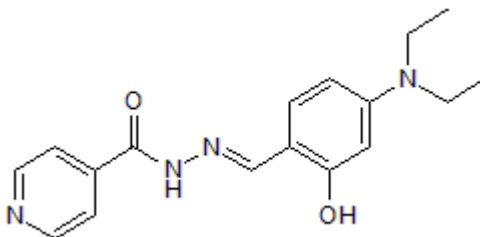
Batch No.: 1

CAS Number: 140405-36-3

IUPAC Name: 2-[[4-(Diethylamino)-2-hydroxyphenyl]methylene]hydrazide-4-pyridinecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₀N₄O₂
Batch Molecular Weight: 312.37
Physical Appearance: Yellow solid
Solubility: DMSO to 50 mM
 ethanol to 5 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	65.37	6.45	17.94
Found	65.09	6.45	17.8

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

Product Information

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Description:

AMP-activated protein kinase (AMPK) activator ($EC_{50} = 1 \mu M$); activates AMPK indirectly through a CaMKK β -dependent mechanism. Also inhibits LPS-induced STAT3 phosphorylation ($IC_{50} = 0.5 \mu M$). Induces autophagy and promotes A β degradation in vitro. Also inhibits adipogenesis in vitro and reduces weight gain in diet-induced obese mice.

Physical and Chemical Properties:

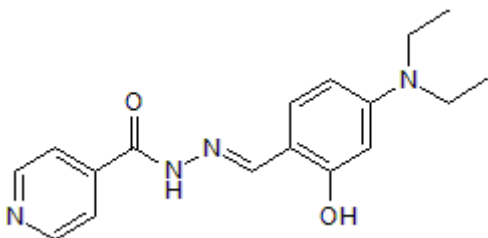
Batch Molecular Formula: C₁₇H₂₀N₄O₂

Batch Molecular Weight: 312.37

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°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 50 mM

ethanol to 5 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. Our standard recommendations are:

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.

References:

Vingtdeux et al (2011) Novel synthetic small-molecule activators of AMPK as enhancers of autophagy and amyloid- β peptide degradation. *FASEB J.* **25** 219. PMID: 20852062.

Vingtdeux et al (2011) Small-molecule activators of AMP-activated protein kinase (AMPK), RSVA314 and RSVA405, inhibit adipogenesis. *Mol Med* **17** 1022. PMID: 21647536.

Capiralla et al (2012) Identification of potent small-molecule inhibitors of STAT3 with anti-inflammatory properties in RAW 264.7 macrophages. *FASEB J.* **27** 3791. PMID: 22909341.

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