

Certificate of Analysis

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Print Date: Jun 24th 2016

Product Name: YK 3-237 Catalog No.: 5667 Batch No.: 1

CAS Number: 1215281-19-8

IUPAC Name: B-[2-Methoxy-5-[(1E)-3-oxo-3-(3,4,5-trimethoxyphenyl)-1-propen-1-yl]phenyl]boronic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{21}BO_7$ Batch Molecular Weight:372.18Physical Appearance:Yellow solid

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

 H_3CO H_3CO OCH_3 OCH_3

2. ANALYTICAL DATA

TLC: $R_f = 0.02$ (Ethyl acetate:Petroleum ether [2:3])

HPLC: Shows >99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.32 5.69 Found 61.38 5.84



Product Information

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Description:

SIRT1 activator. Inhibits proliferation of breast cancer cell lines expressing mutant p53. Induces G2/M cell cycle arrest and apoptosis in triple negative breast cancer cells (TNBCs) in vitro.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₉H₂₁BO₇ Batch Molecular Weight: 372.18 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 100 mM ethanol 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. 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:

Ponnusamy et al (2015) Activation of sirtuin-1 promotes renal fibroblast activation and aggravates renal fibrogenesis. J.Pharmacol.Exp.Ther 354 142. PMID: 26022003.

Yi et al (2013) Targeting mutant p53 by a SIRT1 activator YK-3-237 inhibits the proliferation of triple-negative breast cancer cells. Oncotarget 4 984. PMID: 23846322.

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