

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: TW 37 Catalog No.: 4038 Batch No.: 1

CAS Number: 877877-35-5

IUPAC Name: N-[4-[[2-(1,1-Dimethylethyl)phenyl]sulfonyl]phenyl]-2,3,4-trihydroxy-5-[[2-(1-methylethyl)phenyl]methyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{33}H_{35}NO_6S$

Batch Molecular Weight: 573.7

Physical Appearance: White solid

Solubility: DMSO to 100 mM

ethanol to 5 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.1% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 69.09 6.15 2.44 Found 68.89 6.18 2.46



Product Information

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Description:

Bcl-2 inhibitor (K_i values are 0.29 μM and 1.11 μM for Bcl-2 and Bcl-XL respectively). Inhibits the angiogenic potential of endothelial cells in vitro. Induces S-phase arrest and apoptosis in pancreatic cancer cell lines; also inhibits the activation of Notch-1 and Jagged-1 in vitro and in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₃H₃₅NO₆S Batch Molecular Weight: 573.7 Physical Appearance: White solid

Minimum Purity: >97%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 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:

Wang et al (2006) Structure-based design of potent small-molecule inhibitors of anti-apoptotic Bcl-2 proteins. J.Med.Chem. 49 6139. PMID: 17034116.

Zeitlin et al (2006) Antiangiogenic effect of TW37, a small-molecule inhibitor of Bcl-2. Cancer Res. 66 8698. PMID: 16951185.

Ashimori *et al* (2009) TW-37, a small molecule inhibitor of Bcl-2, mediates S phase cell cycle arrest and suppresses head and neck tumor angiogenesis. Mol.Cancer.Ther. *8* 893. PMID: 19372562.

Wang et al (2009) TW-37, a small molecule inhibitor of Bcl-2, inhibits cell growth and induces apoptosis in pancreatic cancer: involvement of Notch-1 signaling pathway. Cancer Res. 69 2757. PMID: 19318573.