

Certificate of Analysis

Print Date: Jan 14th 2016

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Product Name: SCH 51344 Catalog No.: 5280 Batch No.: 1

CAS Number: 171927-40-5

IUPAC Name: 2-[2-[(6-Methoxy-3-methyl-1*H*-pyrazolo[3,4-*b*]quinolin-4-yl)amino]ethoxy]ethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Solubility: DMSO to 100 mM

ethanol to 10 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

Microanalysis:

HPLC: Shows 99.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Carbon Hydrogen Nitrogen

Theoretical 60.75 6.37 17.71 Found 60.71 6.3 17.74



Product Information

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Description:

Potent MTH1 inhibitor (K_d = 49 nM). Inhibits Ras-induced malignant transformation and increases α-actin promoter-driven CAT activity in Ras-transformed cells. Has no effect on Rasinduced ERK and JNK activation. Inhibits Ras-induced membrane ruffling in REF-52 fibroblasts and blocks anchorageindependent growth of Ras-transformed tumor cell lines. Also induces DNA damage in SW480 colon cancer cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₆H₂₀N₄O₃ Batch Molecular Weight: 316.35 Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 mM with gentle warming

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:

Walsh et al (1997) SCH 51344-induced reversal of RAS-transformation is accompanied by the specific inhibition of the RAS and RACdependent cell morphology pathway. Oncogene 15 2553. PMID: 9399643.

Kumar et al (1999) SCH 51344, an inhibitor of RAS/RAC-mediated cell morphology pathway. Ann.N.Y.Acad.Sci. 886 122. PMID: 10667210.

Huber et al (2014) Stereospecific targeting of MTH1 by (S)-crizotinib as an anticancer strategy. Nature 508 222. PMID: 24695225.