

Certificate of Analysis

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Product Name: SKA 31

Catalog No.: 3670

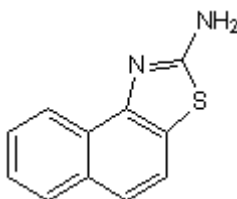
Batch No.: 1

CAS Number: 40172-65-4

IUPAC Name: Naphtho[1,2-d]thiazol-2-ylamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₈N₂S
Batch Molecular Weight: 200.26
Physical Appearance: Grey solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.18 (Dichloromethane)
HPLC: Shows 99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	65.98	4.03	13.99
Found	65.86	3.89	13.93

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

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CAS Number: 40172-65-4

IUPAC Name: Naphtho[1,2-d]thiazol-2-ylamine

Description:

Activator of K_{Ca}3.1 and K_{Ca}2 channels (EC₅₀ values are 260, 2900, 2900 nM for K_{Ca}3.1, K_{Ca}2.1 and K_{Ca}2.2 respectively). Potentiates acetylcholine-induced EDHF-type dilations of mouse carotid arteries and lowers blood pressure in normotensive and hypertensive mice.

Physical and Chemical Properties:

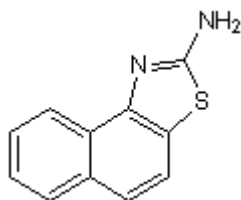
Batch Molecular Formula: C₁₁H₈N₂S

Batch Molecular Weight: 200.26

Physical Appearance: Grey solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Sankaranarayanan et al (2009) Naphtho[1,2-d]thiazol-2-ylamine (SKA-31), a new activator of K_{Ca}2 and K_{Ca}3.1 potassium channels, potentiates the endothelium-derived hyperpolarizing factor response and lowers blood pressure. *Mol.Pharmacol.* **75** 281. PMID: 18955585.

Brahler et al (2009) Genetic deficit of SK3 and IK1 channels disrupts the endothelium-derived hyperpolarizing factor vasodilator pathway and causes hypertension. *Circulation* **119** 2323. PMID: 19380617.

Storage: Store at +4°C

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.

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