TOCRIS bioscience

Print Date: Apr 28th 2015

Certificate of Analysis

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Product Name: **NAB 2** **Catalog No.: 5131** **Batch No.: 2**

CAS Number: 1504588-00-4

IUPAC Name: *N*-[(2-Chlorophenyl)methyl]-1-(2,5-dimethylphenyl)-1*H*-benzimidazole-5-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{23}H_{20}ClN_3O$

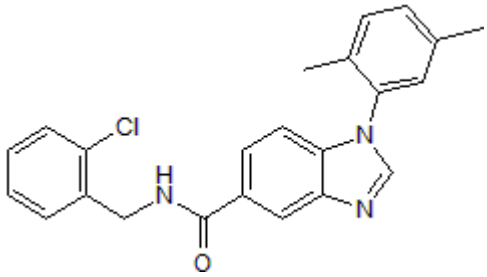
Batch Molecular Weight: 389.88

Physical Appearance: Off-white solid

Solubility: DMSO to 100 mM
ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.6 (Chloroform:Methanol [95:5])

HPLC: Shows 99.4% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.85	5.17	10.78
Found	70.89	5.14	10.83

Product Information

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Description:

Protects against α-synuclein toxicity. Reverses the α-synuclein-induced pathological phenotype in Parkinson's disease cortical neurons. Promotes E3 ubiquitin ligase Rsp5/Nedd4-dependent endosomal transport.

Physical and Chemical Properties:

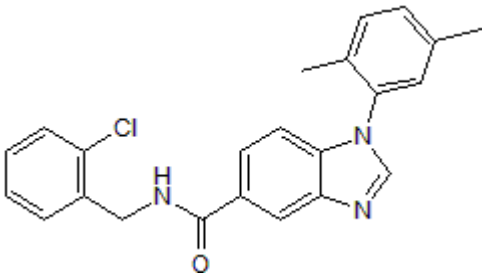
Batch Molecular Formula: $C_{23}H_{20}ClN_3O$

Batch Molecular Weight: 389.88

Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



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.

References:

Tardiff *et al* (2013) Yeast reveal a "druggable" Rsp5/Nedd4 network that ameliorates α-synuclein toxicity in neurons. Science ***342*** 979. PMID: 24158909.

Chung *et al* (2013) Identification and rescue of α-synuclein toxicity in Parkinson patient-derived neurons. Science ***342*** 983. PMID: 24158904.