

Certificate of Analysis

www.tocris.com

Product Name: Co 102862 Catalog No.: 2642 Batch No.: 1

CAS Number: 181144-66-1

IUPAC Name: 2-[[4-(4-Fluorophenoxy)phenyl]methylene]hydrazinecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{12}FN_3O_2$. $1/2H_2O$

Batch Molecular Weight: 282.27
Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

$$H_2N$$
 N N P

2. ANALYTICAL DATA

TLC: $R_f = 0.95$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

HPLC: Shows 99.5% purity
 ¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.57 4.64 14.89 Found 59.83 4.42 14.8





Product Information

Print Date: May 18th 2012

www.tocris.com

Product Name: Co 102862 Catalog No.: 2642 Batch No.: 1

CAS Number: 181144-66-1

IUPAC Name: 2-[[4-(4-Fluorophenoxy)phenyl]methylene]hydrazinecarboxamide

Description:

Broad spectrum, state-dependent blocker of voltage-gated sodium channels. Displays ~ 80-fold higher affinity for inactivated Na+ channels compared to channels in the resting state. Anticonvulsant; displays activity in rodent models of tonic/clonic and partial-complex seizures.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₄H₁₂FN₃O₂. ½H₂O

Batch Molecular Weight: 282.27 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

$$H_2N$$
 N N

Storage: Store at RT

Solubility & Usage Info:

DMSO 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:

Ilyin et al (2005) V102862 (Co 102862): a potent, broad-spectrum state-dependent blocker of mammalian voltage-gated sodium channels. Br.J.Pharmacol. **144** 801. PMID: 15778702.

Ilyin *et al* (2006) Pharmacology of 2-[4-(4-chloro-2-fluorophenoxy)phenyl]-pyrimidine-4-carboxamide: a potent, broad-spectrum state-dependent sodium channel blocker for treating pain states. J.Pharmacol.Exp.Ther. *318* 1083. PMID: 16728593.

