



Certificate of Analysis

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Product Name: L 012 sodium salt Catalog No.: 5085 Batch No.: 1

CAS Number: 143556-24-5

Batch Molecular Structure:

IUPAC Name: 8-Amino-5-chloro-2,3-dihydro-7-phenyl-pyrido[3,4-d]pyridazine sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₈ClN₄NaO₂.2¼H₂O

Batch Molecular Weight: 351.2

Physical Appearance: Yellow solid

Solubility: water to 50 mM DMSO to 100 mM

Store at 20°C

Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 100% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 44.46 3.58 15.95 Found 44.52 3.42 15.8



Product Information

Print Date: Feb 13th 2014

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IUPAC Name: 8-Amino-5-chloro-2,3-dihydro-7-phenyl-pyrido[3,4-d]pyridazine sodium salt

Description:

Luminal-based chemiluminescent probe. Detects NAPDH oxidase-derived reactive oxygen and nitrogen species (ROS and RNS). Active in vitro and in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₃H₈ClN₄NaO₂.2½H₂O

Batch Molecular Weight: 351.2 Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

water to 50 mM 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:

Kielland *et al* (2009) In vivo imaging of reactive oxygen and nitrogen species in inflammation using the luminescent probe L-012. Free Radic.Biol.Med. **47** 760. PMID: 19539751.

Zhou *et al* (2012) Noninvasive assessment of localized inflammatory responses. Free Radic.Biol.Med. *52* 218. PMID: 22080048. **Ichibangase** *et al* (2013) Evaluation of lophine derivatives as L-012 (luminol analog)-dependent chemiluminescence enhancers for measuring horseradish peroxidase and H2 O2. Luminescence. Epub ahead of print. PMID: 23630098.

