

## Certificate of Analysis

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**Product Name:** L 012 sodium salt

**Catalog No.:** 5085

**Batch No.:** 4

CAS Number: 143556-24-5

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:** C<sub>13</sub>H<sub>8</sub>ClN<sub>4</sub>NaO<sub>2</sub>·1<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

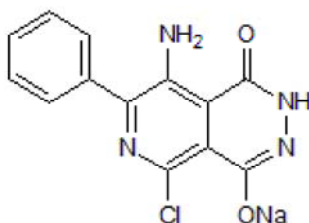
**Batch Molecular Weight:** 342.19

**Physical Appearance:** Yellow solid

**Solubility:** water to 20 mM  
DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.4% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	45.63	3.39	16.37
Found	45.29	3.34	16.09

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

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**Description:**

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

**Physical and Chemical Properties:**

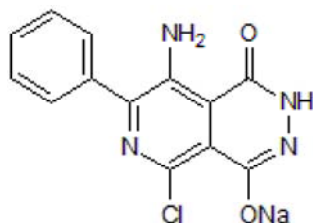
Batch Molecular Formula: C<sub>13</sub>H<sub>8</sub>ClN<sub>4</sub>NaO<sub>2</sub>·1¼H<sub>2</sub>O

Batch Molecular Weight: 342.19

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 20 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:**

**Ichibangase et al** (2013) Evaluation of lophine derivatives as L-012 (luminol analog)-dependent chemiluminescence enhancers for measuring horseradish peroxidase and H<sub>2</sub> O<sub>2</sub>. *Luminescence*. **29** 118. PMID: 23630098.

**Zhou et al** (2012) Noninvasive assessment of localized inflammatory responses. *Free Radic.Biol.Med.* **52** 218. PMID: 22080048.

**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.

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