

## **Certificate of Analysis**

Print Date: Nov 10th 2017

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Product Name: Phenanthroline Catalog No.: 6385 Batch No.: 1

CAS Number: 66-71-7

IUPAC Name: 1,10-Phenanthroline

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{12}H_8N_2.\frac{1}{4}H_2O$ 

Batch Molecular Weight: 184.71

**Physical Appearance:** Off White solid Solubility: DMSO to 100 mM

ethanol to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 99% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 78.03 4.64 15.17 Found 78.02 4.64 15.14



## **Product Information**

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Batch No.: 1

Product Name: Phenanthroline

CAS Number: 66-71-7

IUPAC Name: 1,10-Phenanthroline

**Description:** 

Enhances hPSC differentiation into cranial placode cells. Induces a 5-fold increase in cells expressing SIX1.

**Physical and Chemical Properties:** 

Batch Molecular Formula: C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>.<sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 184.71 Physical Appearance: Off White solid

**Minimum Purity: >99%** 

**Batch Molecular Structure:** 

Storage: Desiccate at RT

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).

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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:

**Tchieu** *et al* (2017) A modular platform for differentiation of human PSCs into all major ectodermal lineages. Cell Stem Cell *21* 399. PMID: 28886367.