

# **Certificate of Analysis**

www.tocris.com

**Product Name: Thalidomide** Catalog No.: 0652 Batch No.: 11

CAS Number: 50-35-1 EC Number: 200-031-1

IUPAC Name: N-(2,6-dioxo-3-piperidinyl)phthalimide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{13}H_{10}N_2O_4$ **Batch Molecular Formula: Batch Molecular Weight:** 258.23 White solid **Physical Appearance:** DMSO to 25 mM Solubility: Store at RT

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

Microanalysis:

Storage:

**HPLC:** Shows >99.9% purity <sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Carbon Hydrogen Nitrogen

Theoretical 60.47 3.9 10.84 Found 60.6 3.86 10.8





# **Product Information**

Print Date: May 18th 2012

www.tocris.com

Product Name: Thalidomide Catalog No.: 0652 Batch No.: 11

CAS Number: 50-35-1 EC Number: 200-031-1

IUPAC Name: N-(2,6-dioxo-3-piperidinyl)phthalimide

#### **Description:**

Teratogen, sedative-hypnotic with inherent anti-inflammatory properties. A selective inhibitor of tumor necrosis factor  $\alpha$  (TNF- $\alpha$ ) synthesis.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>O<sub>4</sub> Batch Molecular Weight: 258.23 Physical Appearance: White solid

**Minimum Purity: >99%** 

#### **Batch Molecular Structure:**

Storage: Store at RT

## Solubility & Usage Info:

DMSO to 25 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:

Merck Index 12 9390.

Sampaio et al (1991) Thalidomide selectively inhibits tumor necrosis factor  $\alpha$  production by stimulated human monocytes. J.Exp.Med. **173** 699. PMID: 1997652.

**Makonkawkeyoon** *et al* (1993) Thalidomide inhibits the replication of human-immunodeficiency-virus type 1. Proc.Natl.Acad.Sci.U.S.A. *90* 5974. PMID: 8327469.

**Kanbayashi** *et al* (1996) Thalidomide, a hypnotic with immune modulating properties, increases cataplexy in canine narcolepsy. Neuroreport **7**1881. PMID: 8905685.

**Boireau** *et al* (1997) Thalidomide reduces MPTP-induced decrease in striatal dopamine levels in mice. Neurosci.Lett. **234** 123. PMID: 9364513.

**Zhang** et al (2008) Thalidomide influences growth and vasculogenic mimicry channel formation in melanoma. J.Exp.Clin.Cancer Res. **27** 60. PMID: 18983651.

