



# **Certificate of Analysis**

www.tocris.com

Product Name: Bay 11-7085 Catalog No.: 1743 Batch No.: 2

CAS Number: 196309-76-9

IUPAC Name: (2*E*)-3-[[4-(1,1-Dimethylethyl)phenyl]sulfonyl]-2-propenenitrile

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{13}H_{15}NO_2S$ 

Batch Molecular Weight: 249.33

Physical Appearance: White crystalline solid

Solubility: ethanol to 100 mM

DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

Me CN

vle′ l Mα

2. ANALYTICAL DATA

**TLC:**  $R_f = 0.35$  (Ethyl acetate:Petroleum ether [1:4])

Melting Point:Between 88 - 90°CHPLC:Shows >99.3% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.63 6.06 5.62 Found 62.51 6.16 5.52



# **Product Information**

Print Date: Apr 28<sup>th</sup> 2015

www.tocris.com

Product Name: Bay 11-7085 Catalog No.: 1743 Batch No.: 2

CAS Number: 196309-76-9

IUPAC Name: (2*E*)-3-[[4-(1,1-Dimethylethyl)phenyl]sulfonyl]-2-propenenitrile

### **Description:**

Irreversible inhibitor of TNF- $\alpha$ -stimulated I $\kappa$ B $\alpha$  phosphorylation (IC $_{50}$  ~ 10  $\mu$ M); leads to decreased NF- $\kappa$ B and subsequent decreased expression of adhesion molecules. Also reversibly activates MAP kinases and stimulates apoptosis. Anti-inflammatory in vivo.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>13</sub>H<sub>15</sub>NO<sub>2</sub>S Batch Molecular Weight: 249.33

Physical Appearance: White crystalline solid

Minimum Purity: >99%

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

Storage: Store at +4°C

# Solubility & Usage Info:

ethanol to 100 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:

Pierce et al (1997) Novel inhibitors of cytokine-induced IkBa phosphorylation and endothelial cell adhesion molecule expression show anti-inflammatory effects in vivo. J.Biol.Chem. 272 21096. PMID: 9261113.

**Hu** et al (2001) An IκBα inhibitor causes leukemia cell death through a p38 MAP kinase-dependent, NF-κB-independent mechanism. Cancer Res. **61** 6290. PMID: 11507084.

Scaife et al (2002) Nuclear factor κB inhibitors induce adhesion-dependent colon cancer apoptosis: implications for metastasis. Cancer Res. 62 6870. PMID: 12460901.

