

# **Certificate of Analysis**

Print Date: May 16th 2022

www.tocris.com

Product Name: ABT 263 Catalog No.: 7680 Batch No.: 1

CAS Number: 923564-51-6

IUPAC Name: 4-[4-[[2-(4-Chlorophenyl)-5,5-dimethyl-1-cyclohexen-1-yl]methyl]-1-piperazinyl]-N-[[4-[[(1R)-3-(4-morpholinyl)-1-

[(phenylthio)methyl]propyl]amino]-3-[(trifluoromethyl)sulfonyl]phenyl]sulfonyl]benzamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{47}H_{55}CIF_3N_5O_6S_3.1/2H_2O$ 

Batch Molecular Weight: 983.63

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 97.9% purity

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

**Optical Rotation:**  $[\alpha]_D = -53.8$  (Concentration = 0.3, Solvent = MeOH)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.39 5.74 7.12 Found 57.07 5.68 7.11

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



# **Product Information**

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#### **Description:**

ABT 263 is a high affinity inhibitor of Bcl-2 family proteins ( $K_i$  values are 0.5 nM, <1 nM and <1 nM in Bcl-xL, Bcl-2 and Bcl-W respectively). ABT 263 induces  $G_1/G_0$  phase arrest, apoptosis and autophagy in cancer cells in vitro ( $IC_{50}=3.4$  - 12  $\mu$ M). In vivo, ABT 263 displays a synergistic antitumor effect with rituximab and Bortezomib (Cat. No. 7282), Docetaxel (Cat. No. 4056) and Erlotinib (Cat. No. 7194), and inhibits growth of SCLC xenografts when combined with (+)-JQ1 (Cat. No. 4499). ABT 263 also reduces inflammation and viral-induced senescence in SARS-CoV-2 infection in vivo, and clears senescent cells and rejuvenates ag... Please see product specific page on www.tocris.com for full description.

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

Batch Molecular Formula: C<sub>47</sub>H<sub>55</sub>ClF<sub>3</sub>N<sub>5</sub>O<sub>6</sub>S<sub>3</sub>.½H<sub>2</sub>O

Batch Molecular Weight: 983.63 Physical Appearance: Off White solid

Minimum Purity: ≥98%

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

Storage: Store at -20°C

### Solubility & Usage Info:

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:

Lee et al (2021) Virus-induced senescence is a driver and therapeutic target in COVID-19. Nature 599 283. PMID: 34517409.

**Wang** *et al* (2017) JQ1 synergizes with the Bcl-2 inhibitor ABT-263 against MYCN-amplified small cell lung cancer. Oncotarget *8* 86312. PMID: 29156797.

Chang et al (2016) Clearance of senescent cells by ABT263 rejuvenates aged hematopoietic stem cells in mice. Nat.Med. 22 78. PMID: 26657143.

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