

# **Certificate of Analysis**

Print Date: Aug 23rd 2022

www.tocris.com

Product Name: ABT 199 Catalog No.: 6960 Batch No.: 2

CAS Number: 1257044-40-8

IUPAC Name: 4-[4-[[2-(4-Chlorophenyl)-4,4-dimethyl-1-cyclohexen-1-yl]methyl]-1-piperazinyl]-*N*-[[3-nitro-4-[[(tetrahydro-2*H*-pyran-

4-yl)methyl]amino]phenyl]sulfonyl]-2-(1*H*-pyrrolo[2,3-*b*]pyridin-5-yloxy)benzamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{45}H_{50}CIN_7O_7S$ .

**Batch Molecular Weight:** 868.45

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 99.6% purity

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

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 62.24 5.8 11.29 Found 61.84 5.75 11.11

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



# **Product Information**

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4-yl)methyl]amino]phenyl]sulfonyl]-2-(1H-pyrrolo[2,3-b]pyridin-5-yloxy)benzamide

#### **Description:**

ABT 199 is a selective, high affinity Bcl-2 inhibitor ( $K_i < 0.010$  nM). Exhibits >4800-fold selectivity for Bcl-2 over Bcl-xL and Bcl-w, and displays no measurable activity at Mcl-1 ( $K_i > 444$  nM). Potently induces apoptosis in FL5.12-BCL-2 cells (EC $_{50} = 261$  nM) and reduces tumor burden in chronic lymphocytic leukemia (CLL) primary samples (EC $_{50} = 3$  nM). Shows reduced toxicity to platelets compared to similar compounds. Enhances efficacy of clinically relevant chemotherapy and immunotherapy drugs. Orally bioavailable. Exhibits binding to SARS-CoV-2 3C-like protease (3CLpro) active site in a virtual screen. ABT 199 reverses oxidat... Please see product specific page on www.tocris.com for full description.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>45</sub>H<sub>50</sub>CIN<sub>7</sub>O<sub>7</sub>S.

Batch Molecular Weight: 868.45 Physical Appearance: Yellow solid

**Minimum Purity:** ≥98%

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

CI N N O NH NO2

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:

**Bosc** et al (2021) Mitochondrial inhibitors circumvent adaptive resistance to venetoclax and cytarabine combination therapy in acute myeloid leukemia. Nat.cancer **2** 1204. PMID: 35122057.

Liu et al (2019) Balancing apoptosis and autophagy for Parkinson's disease therapy: targeting BCL-2. ACS Chem.Neurosci. 10 792. PMID: 30400738.

**Soderquist** *et al* (2018) Systematic mapping of BCL-2 gene dependencies in cancer reveals molecular determinants of BH3 mimetic sensitivity. Nat.Commun. **9** 3513. PMID: 30158527. Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use