

# **Certificate of Analysis**

Print Date: Dec 12th 2019

www.tocris.com

Product Name: Ambrisentan Catalog No.: 5828 Batch No.: 2

CAS Number: 177036-94-1

IUPAC Name:  $(\alpha S)-\alpha-[(4,6-Dimethyl-2-pyrimidinyl)oxy]-\beta-methoxy-\beta-phenylbenzenepropanoic acid$ 

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{22}N_2O_4$ Batch Molecular Weight:378.42Physical Appearance:White solid

**Solubility:** DMSO to 100 mM

ethanol to 100 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 99.8% purity

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

Mass Spectrum: Consistent with structure

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> = +173.6 (Concentration = 0.5, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 69.83 5.86 7.4 Found 69.89 5.85 7.42

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

Tel:+1 612 379 2956



# **Product Information**

Print Date: Dec 12th 2019

www.tocris.com

Product Name: Ambrisentan Catalog No.: 5828 Batch No.: 2

CAS Number: 177036-94-1

IUPAC Name:  $(\alpha S)-\alpha-[(4,6-Dimethyl-2-pyrimidinyl)oxy]-\beta-methoxy-\beta-phenylbenzenepropanoic acid$ 

#### **Description:**

Selective endothelin receptor  $ET_A$  antagonist. Displays approximately 200-fold selectivity for  $ET_A$  over  $ET_B$  ( $K_i$  values are 1 nM and 195 nM for respectively). Prevents endothelin-induced sudden death in rats.

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

Batch Molecular Formula: C<sub>22</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub> Batch Molecular Weight: 378.42 Physical Appearance: White solid

Minimum Purity: ≥99%

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

Storage: Store at +4°C

# 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).

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:

**Vatter & Seifert** (2006) Ambrisentan, a non-peptide endothelin receptor antagonist. Cardiovasc.Drug Rev. **24** 63. PMID: 16939634. **Riechers** *et al* (1996) Discovery and optimization of a novel class of orally active nonpeptidic endothelin-A receptor antagonists. J.Med.Chem. **39** 2123. PMID: 8667356.

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