Certificate of Analysis

www.tocris.com

Print Date: Apr 14th 2020

Product Name: L-371,257

Catalog No.: 2410 Batch No.: 3

IUPAC Name:

1-[4-[(1-Acetyl-4-piperidinyl)oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)piperidine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: Storage: **Batch Molecular Structure:**

 $C_{28}H_{33}N_3O_6.\frac{1}{2}H_2O$ 516.6 Off-white solid DMSO to 5 mM with gentle warming Store at RT

2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: **Microanalysis:**

Shows 99.0% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 65.1 6.63 8.13

6.54

8.21

65.13

Found

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



CAS Number: 162042-44-6

TOCRIS a biotechne brand

Print Date: Apr 14th 2020

Batch No.: 3

Product Name: L-371,257

CAS Number: 162042-44-6

IUPAC Name:

1-[4-[(1-Acetyl-4-piperidinyl)oxy]-2-methoxybenzoyl]-4-(2-oxo-2H-3,1-benzoxazin-1(4H)-yl)piperidine

Description:

Potent, high affinity human oxytocin (OT) receptor antagonist (K_i = 4.6 nM) that displays > 800-fold selectivity over human arginine vasopressin receptors V_{1a} and V₂. Antagonizes oxytocin-induced contractions in isolated rat uterine tissue (pA₂ = 8.44) and in anesthetised rats following intravenous and intraduodenal administration. Decreases length of U-87MG cell projections induced by retinoic acid (Cat.No.0695). Orally active.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₈H₃₃N₃O₆.½H₂O Batch Molecular Weight: 516.6 Physical Appearance: Off-white solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 5 mM with gentle warming

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).

Catalog No.: 2410

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:

Tahara *et al* (2000) Pharmacologic characterization of the oxyt. receptor in human uterine smooth muscle cells. Br.J.Pharmacol. **129** 131. PMID: 10694212.

Tahara *et al* (1999) Comparison of vasopressin binding sites in human uterine and vascular smooth muscle cells. Eur.J.Pharmacol. **378** 137. PMID: 10478574.

Williams et al (1995) 1-{1-[4-[N-acetyl-4-piperidinyl)oxy]-2-methoxybenzoyl]piperidin-4-yl}-4H-3,1-benzoxazin-2(1H)-one (L-371,257): a new, orally bioavailable, non-peptide oxyt. antagonist. J.Med.Chem. **38** 4634. PMID: 7473590.

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956