# **bio-techne**<sup>®</sup> TOCRIS

### **Certificate of Analysis**

#### www.tocris.com

**Product Name:** U 46619

#### Catalog No.: 1932 Batch No.: 12

CAS Number: **IUPAC Name:** 

(5Z)-7-[(1R,4S,5S,6R)-6-[(1E,3S)-3-Hydroxy-1-octenyl]-2-oxabicyclo[2.2.1]hept-5-yl]-5-heptenoic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

56985-40-1

**Batch Molecular Formula: Batch Molecular Weight: Physical Appearance:** Solubility: Storage: **Batch Molecular Structure:**  C<sub>21</sub>H<sub>34</sub>O<sub>4</sub> 350.5 Colourless liquid Soluble in methyl acetate (supplied pre-dissolved -10mg/ml) Store at -20°C

CO<sub>2</sub>H Me ōн

2. ANALYTICAL DATA HPLC: Mass Spectrum:

Shows 100.0 % purity Consistent with structure

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

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12

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#### Description:

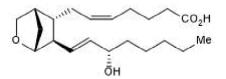
U 46619 is a PGH<sub>2</sub> (TXA<sub>2</sub>) analog that is a potent and stable thromboxane A<sub>2</sub> (TP) receptor agonist (EC<sub>50</sub> = 0.035  $\mu$ M). Potently stimulates TP receptor-mediated, but not other prostaglandin receptor-mediated responses in various in vitro preparations. Activates ERK-1 and ERK-2 in HEK 293 cells expressing TP $\alpha$  and TP $\beta$  receptors.

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

Batch Molecular Formula: C<sub>21</sub>H<sub>34</sub>O<sub>4</sub> Batch Molecular Weight: 350.5 Physical Appearance: Colourless liquid

#### Minimum Purity: ≥98%

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



#### Storage: Store at -20°C

#### Solubility & Usage Info:

Soluble in methyl acetate (supplied pre-dissolved -10mg/ml)

Catalog No.: 1932

This compound is supplied pre-dissolved in Methyl acetate (10mg/ml). To change the solvent, evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the chosen solvent (preferably purged with nitrogen beforehand). The solubility of U 46619 is greater than 100mM in both DMSO and Ethanol, and about 5mM in PBS. We do not recommend storing aqueous solutions for more than a day.

#### 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:**

**Miggin and Kinsella** (2002) Regulation of extracellular signal-regulated kinase cascades by  $\alpha$ - and  $\beta$ -isoforms of the human thromboxane A<sub>2</sub> receptor. Mol.Pharmacol. **61** 817. PMID: 11901221.

**Morinelli** *et al* (1987) Receptor-mediated effects of a PGH<sub>2</sub> analogue (U 46619) on human platelets. Am.J.Physiol. **253** H1035. PMID: 3688248.

**Coleman** *et al* (1981) Comparison of the actions of U-46619, a prostaglandin  $H_2$ -analogue, with those of prostaglandin  $H_2$  and thromboxane  $A_2$  on some isolated smooth muscle preparations. Br.J.Pharmacol. **73** 773. PMID: 7248665.

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