



Certificate of Analysis

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Product Name: L-161,982 Catalog No.: 2514 Batch No.: 2

CAS Number: 147776-06-5

IUPAC Name: N-[[4'-[[3-Butyl-1,5-dihydro-5-oxo-1-[2-(trifluoromethyl)phenyl]-4H-1,2,4-triazol-4-yl]methyl][1,1'-biphenyl]-2-yl]

sulfonyl]-3-methyl-2-thiophenecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{32}H_{29}F_3N_4O_4S_2$

Batch Molecular Weight: 654.72

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.3$ (Dichloromethane:Methanol [9:1])

HPLC: Shows 99.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 58.7 4.46 8.55 Found 58.46 4.39 8.52

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



Product Information

Print Date: Mar 10th 2022

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Description:

L-161,982 is an EP₄ receptor antagonist that is selective over all other members of the prostanoid receptor family (K_i values are 0.024, 0.71, 1.90, 5.10, 5.63, 6.74, 19 and 23 μ M for human EP₄, TP, EP₃, DP, FP, IP, EP₁ and EP₂ receptors respectively). Suppresses PGE₂-induced bone formation in rats and prevents the nociceptive response induced by Misoprostol (Cat. No. 2297) in formalin-injected mice.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₂H₂₉F₃N₄O₄S₂

Batch Molecular Weight: 654.72 Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Desiccate at +4°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:

Balzary *et al* (2006) Lipopolysaccharide induces epithelium- and prostaglandin E₂-dependent relaxation of mouse isolated trachea through activation of cyclooxygenase (COX)-1 and COX-2. J.Pharmacol.Exp.Ther. **317** 806. PMID: 16464966.

Oliva et al (2006) Role of periaqueductal grey prostaglandin receptors in formalin-induced hyperalgesia. Eur.J.Pharmacol. **530** 40. PMID: 16360148.

Machwate et al (2001) Prostaglandin receptor EP₄ mediates the bone anabolic effects of PGE₂. Mol.Pharmacol. **60** 36. PMID: 11408598.

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