TOCRIS
a bio-techne brand

Print Date: Jan 16th 2016

Certificate of Analysis

www.tocris.com

Product Name: **MRS 1477** **Catalog No.: 5246** **Batch No.: 1**

CAS Number: 212200-21-0

IUPAC Name: 4-Ethyl-1,4-dihydro-5-[[(2-methoxyethyl)thio]carbonyl]-6-methyl-2-phenyl-3-pyridinecarboxylic acid ethyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{27}NO_4S$

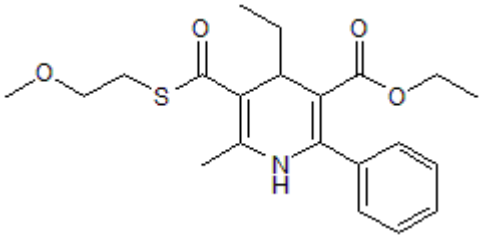
Batch Molecular Weight: 389.51

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM
ethanol to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.39 (Ethyl acetate:Petroleum ether)

HPLC: Shows 99% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.75	6.99	3.6
Found	64.95	7.02	3.57

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **MRS 1477** **Catalog No.: 5246** **Batch No.: 1**

CAS Number: 212200-21-0

IUPAC Name: 4-Ethyl-1,4-dihydro-5-[[(2-methoxyethyl)thio]carbonyl]-6-methyl-2-phenyl-3-pyridinecarboxylic acid ethyl ester

Description:

TRPV1 positive allosteric modulator. Potentiates vanilloid and proton activation of TRPV1 channels. Exhibits analgesic effects in combination with capsaicin (Cat. No. 0462) in rats. Also prolongs capsaicin-induced hypothermia in mice.

Physical and Chemical Properties:

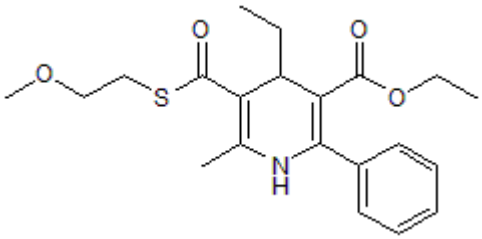
Batch Molecular Formula: $C_{21}H_{27}NO_4S$

Batch Molecular Weight: 389.51

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM
ethanol to 50 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:

Roh *et al* (2008) Structure-activity relationships of 1,4-dihydropyridines that act as enhancers of the vanilloid receptor 1 (TRPV1). Bioorg.Med.Chem. ***16*** 9349. PMID: 18809334.

Kaszas *et al* (2012) Small molecule positive allosteric modulation of TRPV1 activation by vanilloids and acidic pH. J.Pharmacol.Exp.Ther. ***340*** 152. PMID: 22005042.

Lebovitz *et al* (2012) Positive allosteric modulation of TRPV1 as a novel analgesic mechanism. Mol.Pain ***8***. PMID: 22998799.

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956