

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** Sulprostone

**Catalog No.:** 3049

**Batch No.:** 3

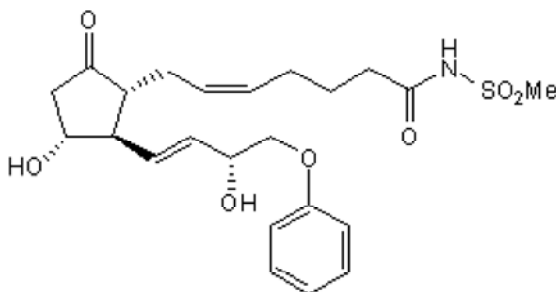
CAS Number: 60325-46-4

EC Number: 262-173-0

IUPAC Name: (5Z)-7-[(1R,2R,3R)-3-Hydroxy-2-[(1E,3R)-3-hydroxy-4-buten-1-yl]-5-oxocyclopentyl]-N-(methylsulfonyl)-5-heptenamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>23</sub> H <sub>31</sub> NO <sub>7</sub> S
<b>Batch Molecular Weight:</b>	465.56
<b>Physical Appearance:</b>	Colourless liquid
<b>Solubility:</b>	Soluble in methyl acetate (supplied pre-dissolved - 5mg/ml)
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



### 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 99% purity
<b>Mass Spectrum:</b>	Consistent with structure

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

**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](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

## Product Information

[www.tocris.com](http://www.tocris.com)

**Product Name:** Sulprostone

**Catalog No.:** 3049

**Batch No.:** 3

**CAS Number:** 60325-46-4

**EC Number:** 262-173-0

**IUPAC Name:** (5Z)-7-[(1R,2R,3R)-3-Hydroxy-2-[(1E,3R)-3-hydroxy-4-buten-1-yl]-5-oxocyclopentyl]-N-(methylsulfonyl)-5-heptenamide

### Description:

Sulprostone is a selective EP<sub>3</sub> and EP<sub>1</sub> receptor agonist (K<sub>i</sub> values are 0.6 and 21 nM respectively). Synthetic PGE<sub>2</sub> analog and allodynic agent.

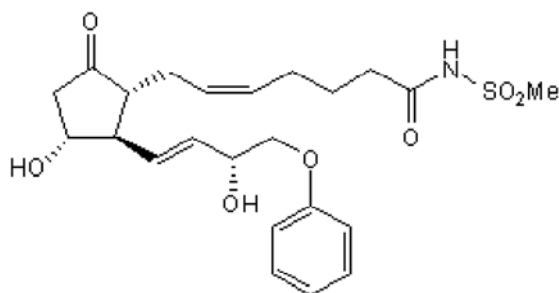
### Physical and Chemical Properties:

Batch Molecular Formula: C<sub>23</sub>H<sub>31</sub>NO<sub>7</sub>S

Batch Molecular Weight: 465.56

Physical Appearance: Colourless liquid

### Batch Molecular Structure:



**Storage:** Store at -20°C

### Solubility & Usage Info:

Soluble in methyl acetate (supplied pre-dissolved - 5mg/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 Sulprostone is greater than 10mM in both DMSO and Ethanol. Stock solutions can then be further diluted into aqueous buffers. 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. 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:

**Gil et al** (2008) Transient allodynia pain models in mice for assessment of analgesic activity. *Br.J.Pharmacol.* **153** 769. PMID: 17700719.

**Narumiya et al** (1999) Prostanoid receptors: Structures, properties, and functions. *Phys.Rev.* **79** 1193.

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

**bio-techne.com**

[info@bio-techne.com](mailto:info@bio-techne.com)

[techsupport@bio-techne.com](mailto:techsupport@bio-techne.com)

**North America**

Tel: (800) 343 7475

**China**

[info.cn@bio-techne.com](mailto: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](http://www.tocris.com/distributors)

Tel: +1 612 379 2956