TOCRIS
a bio-techne brand

Print Date: Aug 2nd 2021

# Certificate of Analysis

www.tocris.com

**Product Name:** **BOP** **Catalog No.: 6047** **Batch No.: 2**

CAS Number: 1947348-42-6

IUPAC Name: *N*-(Benzenesulfonyl)-L-prolyl-L-*O*-(1-pyrrolidinylcarbonyl)tyrosine sodium salt

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{25}H_{28}N_3O_7SNa.¼H_2O$

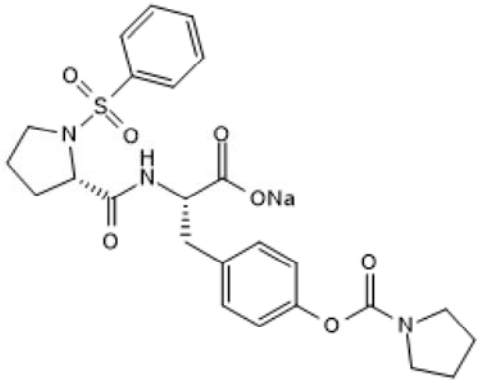
**Batch Molecular Weight:** 542.06

**Physical Appearance:** White solid

**Solubility:** water to 100 mM
DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 98.0% purity at 220 nm

**$^1$H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

| | Carbon | Hydrogen | Nitrogen |
|---|---|---|---|
| Theoretical | 55.39 | 5.3 | 7.75 |
| Found | 55.05 | 4.91 | 7.48 |



**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 Information



**Product Name:** **BOP** **Catalog No.: 6047** **Batch No.: 2**

CAS Number: 1947348-42-6

IUPAC Name: *N*-(Benzenesulfonyl)-L-prolyl-L-*O*-(1-pyrrolidinylcarbonyl)tyrosine sodium salt

**Description:**

BOP is a dual α9β1/α4β1 integrin inhibitor; rapidly and preferentially mobilizes HSCs and progenitors. Augments HSC mobilization in combination with AMD3100 (Cat. No. 3299). Fluorogenic, bright and photostable Fluorescent Conjugate BOP-JF646 (Cat. No. 6997) also available. High affinity fluorescent derivative R-BC154 (Cat. No. 6048) also available.

**Physical and Chemical Properties:**

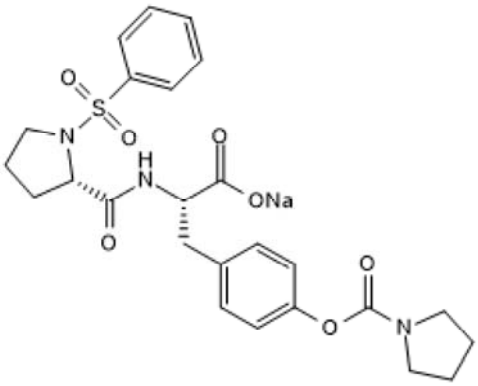
Batch Molecular Formula: $C_{25}H_{28}N_3O_7SNa.¼H_2O$

Batch Molecular Weight: 542.06

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**




**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

**Solubility & Usage Info:**

water to 100 mM
DMSO to 100 mM

Standard retail vials are prepared by lyophilisation. The product may appear as a solid, a gel or a film. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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:**

**Cao** *et al* (2016) Therapeutic targeting and rapid mobilization of endosteal HSC using a small molecule integrin antagonist. Nat.Commun. ***7*** 11007. PMID: 26975966.

**Cao** *et al* (2014) Design, synthesis and binding properties of a fluorescent α9β1/α4β1 integrin antagonist and its application as an *in vivo* probe for bone marrow haemopoietic stem cells. Org.Biomol.Chem. ***12*** 965. PMID: 24363056.

**Pepinsky** *et al* (2002) Comparative assessment of the ligand and metal ion binding properties of integrins α9β1 and α4β1. Biochemistry ***41*** 7125. PMID: 12033947.



**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