

## Certificate of Analysis

**Product Name:** PD 166793

**Catalog No.:** 2520

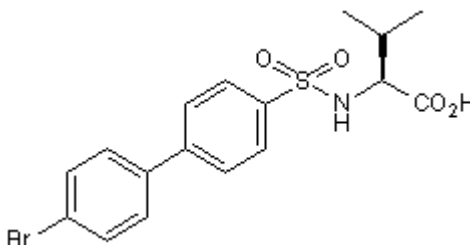
**Batch No.:** 2

CAS Number: 199850-67-4

IUPAC Name: *N*-[(4'-Bromo[1,1'-biphenyl]-4-yl)sulfonyl]-L-valine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>18</sub>BrNO<sub>4</sub>S  
**Batch Molecular Weight:** 412.3  
**Physical Appearance:** White crystalline solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.15 (Ethyl acetate)  
**HPLC:** Shows 99.8% purity  
**Chiral HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +49.3 (Concentration = 2, Solvent = Methanol)

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	49.52	4.4	3.4
Found	49.42	4.39	3.46

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

**Product Name:** PD 166793

**Catalog No.:** 2520

**Batch No.:** 2

CAS Number: 199850-67-4

IUPAC Name: *N*-[(4'-Bromo[1,1'-biphenyl]-4-yl)sulfonyl]-L-valine

**Description:**

Broad spectrum MMP inhibitor. Displays high affinity for MMP-2, -3 and -13 (IC<sub>50</sub> values are 4, 7 and 8 nM respectively) and exhibits > 750-fold selectivity over MMP-1, -7 and -9. Attenuates left ventricular remodelling and dysfunction in rat model of heart failure.

**Physical and Chemical Properties:**

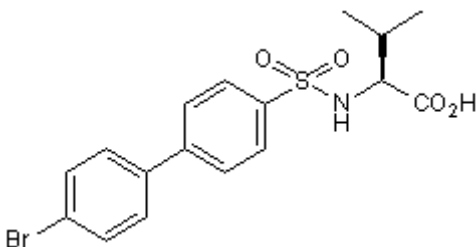
Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>BrNO<sub>4</sub>S

Batch Molecular Weight: 412.3

Physical Appearance: White crystalline solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol 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:**

**O'Brien et al** (2000) Structure-activity relationships and pharmacokinetic analysis for a series of potent, systemically available Biphenylsulfonamide matrix metalloproteinase inhibitors. *J. Med. Chem.* **43** 156. PMID: 10649971.

**Peterson et al** (2001) Matrix metalloproteinase inhibition attenuates left ventricular remodeling and dysfunction in a rat model of progressive heart failure. *Circulation* **103** 2303. PMID: 11342481.

**Chancey et al** (2002) Effects of matrix metalloproteinase inhibition on ventricular remodeling due to volume overload. *Circulation* **105** 1983. PMID: 11997287.

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  
Tel: +1 612 379 2956