

## Certificate of Analysis

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**Product Name:** FAK Inhibitor 14

**Catalog No.:** 3414

**Batch No.:** 2

CAS Number: 4506-66-5

EC Number: 224-822-6

IUPAC Name: 1,2,4,5-Benzenetetramine tetrahydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>6</sub>H<sub>10</sub>N<sub>4</sub>.4HCl.½H<sub>2</sub>O

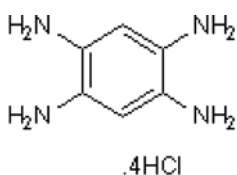
**Batch Molecular Weight:** 293.02

**Physical Appearance:** Grey solid

**Solubility:** water to 50 mM  
DMSO to 75 mM  
ethanol to 5 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	24.59	5.16	19.12
Found	24.47	4.87	18.87

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

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**Description:**

FAK Inhibitor 14 is a selective focal adhesion kinase (FAK) inhibitor that displays no significant activity at a range of other kinases including EGFR, PDGFR and IGF-RI. FAK Inhibitor 14 prevents FAK autophosphorylation at Y397 ( $IC_{50} = 1 \mu M$ ), promotes cell detachment and inhibits cell adhesion in vitro. FAK Inhibitor 14 exhibits antiproliferative activity in a variety of human tumor cell lines in vitro and in breast cancer cells in vivo.

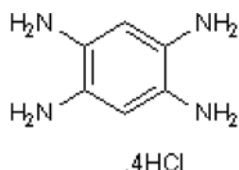
**Physical and Chemical Properties:**

Batch Molecular Formula:  $C_6H_{10}N_4 \cdot 4HCl \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 293.02

Physical Appearance: Grey solid

**Batch Molecular Structure:**



**References:**

**Hochwald *et al*** (2009) A novel small molecule inhibitor of FAK decreases growth of human pancreatic cancer. *Cell Cycle* **8** 2435. PMID: 19571674.

**Golubovskaya *et al*** (2008) A small molecule inhibitor, 1,2,4,5-benzenetetraamine tetrahydrochloride, targeting the Y397 site of focal adhesion kinase decreases tumour growth. *J.Med.Chem.* **51** 7405. PMID: 18989950.

**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 50 mM  
DMSO to 75 mM  
ethanol to 5 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.

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