

**Product Name:** CB 839

**Catalog No.:** 7591

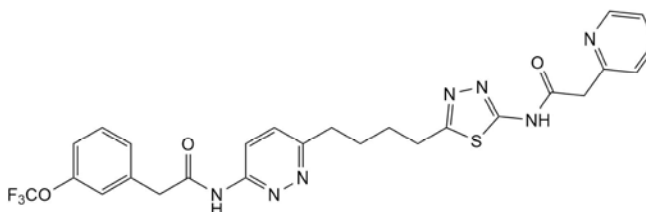
**Batch No.:** 1

CAS Number: 1439399-58-2

IUPAC Name: *N*-[5-[4-[6-[[2-[3-(Trifluoromethoxy)phenyl]acetyl]amino]-3-pyridazinyl]butyl]-1,3,4-thiadiazol-2-yl]-2-pyridineacetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>26</sub> H <sub>24</sub> F <sub>3</sub> N <sub>7</sub> O <sub>3</sub> S.
<b>Batch Molecular Weight:</b>	571.58
<b>Physical Appearance:</b>	White solid
<b>Solubility:</b>	DMSO to 100 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 99.8% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>Microanalysis:</b>	

	Carbon	Hydrogen	Nitrogen
Theoretical	54.64	4.23	17.15
Found	54.49	4.19	17.11

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

**Product Name:** CB 839

**Catalog No.:** 7591

**Batch No.:** 1

CAS Number: 1439399-58-2

IUPAC Name: *N*-[5-[4-[6-[[2-[3-(Trifluoromethoxy)phenyl]acetyl]amino]-3-pyridazinyl]butyl]-1,3,4-thiadiazol-2-yl]-2-pyridineacetamide

**Description:**

CB 839 is a potent non-competitive glutaminase (GLS1) inhibitor ( $IC_{50}$  = 24 nM for recombinant human GAC). The compound exhibits selectivity for GLS1 over GLS2. CB 839 displays antiproliferative activity in a triple-negative breast cancer cell line ( $GI_{50}$  values are 19 and 55 nM against MDA-MB-231 and HCC1806, respectively); it reduces glutamine consumption and glutamate production rates in HCC1806 cells. CB 839 displays significant antitumor activity as a single agent in a patient-derived TNBC xenografts model. CB 839 inhibits the growth of basal-like HER2 cell line JIMT-1 xenografts in mice, both as a single agent and in combination with Pacl... Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**

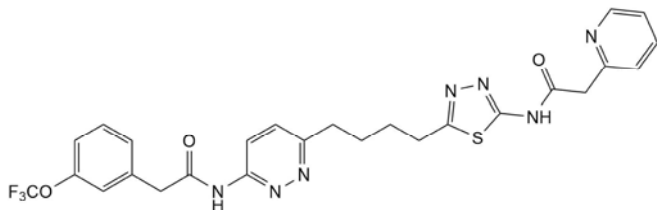
Batch Molecular Formula:  $C_{26}H_{24}F_3N_7O_3S$ .

Batch Molecular Weight: 571.58

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Zhou *et al*** (2019) Estrogen inhibits autophagy and promotes growth of endometrial cancer by promoting glutamine metabolism. *Cell Commun.Signal.* **17** 99. PMID: 31429768.

**Biancur *et al*** (2017) Compensatory metabolic networks in pancreatic cancers upon perturbation of glutamine metabolism. *Nat.Commun.* **8** 15965. PMID: 28671190.

**Momcilovic *et al*** (2017) Targeted inhibition of EGFR and glutaminase induces metabolic crisis in EGFR mutant lung cancer. *Cell Rep.* **18** 601. PMID: 28099841.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO 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.

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