TOCRIS
a bio-techne brand

Print Date: Feb 26th 2020

Certificate of Analysis

www.tocris.com

Product Name: **TCN 201** **Catalog No.: 4154** **Batch No.: 2**

CAS Number: 852918-02-6

IUPAC Name: 3-Chloro-4-fluoro-*N*-[4-[[2-(phenylcarbonyl)hydrazino]carbonyl]benzyl]benzenesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{17}ClFN_3O_4S$

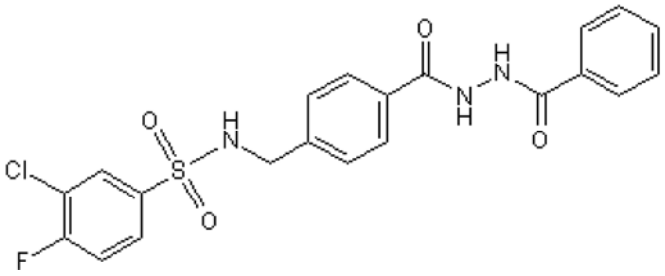
Batch Molecular Weight: 461.89

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.2% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.61	3.71	9.1
Found	54.71	3.68	9.14

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: **TCN 201** **Catalog No.: 4154** **Batch No.: 2**

CAS Number: 852918-02-6

IUPAC Name: 3-Chloro-4-fluoro-*N*-[4-[[2-(phenylcarbonyl)hydrazino]carbonyl]benzyl]benzenesulfonamide

Description:

NMDA receptor antagonist selective for GluN1/GluN2A (formally NR1/NR2A) over GluN1/GluN2B (formally NR1/NR2B) containing receptors (pIC_{50} values are 6.8 and <4.3, respectively, in human recombinant GluN1/GluN2A (formally NR1/NR2A) and GluN1/GluN2B (formally NR1/NR2B) FLIPR/Ca^{2+} assays). Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

Physical and Chemical Properties:

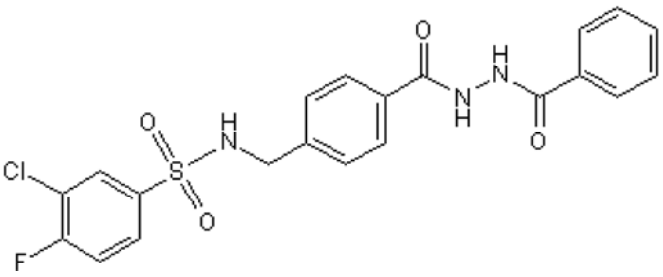
Batch Molecular Formula: $C_{21}H_{17}ClFN_3O_4S$

Batch Molecular Weight: 461.89

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at +4°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.

References:

Gipson *et al* (2013) Reinstatement of nicotine seeking is mediated by glutamatergic plasticity. Proc.Natl.Acad.Sci.U S A [Epub ahead of print]. PMID: 23671067.

Edman *et al* (2012) TCN 201 selectively blocks GluN2A-containing NMDARs in a GluN1 co-agonist dependent but non-competitive manner. Neuropharmacology ***63*** 441. PMID: 22579927.

Hansen *et al* (2012) Subunit-selective allosteric inhibition of glycine binding to NMDA receptors. J.Neurosci. ***32*** 6197. PMID: 22553026.

Shin *et al* (2011) Subtype selective NMDA receptor antagonists induce recovery of synapses lost following exposure to HIV-1 Tat. Br.J.Pharmacol. ***166*** 1002. PMID: 22142193.

Bettini *et al* (2010) Identification and characterization of novel NMDA receptor antagonists selective for NR2A- over NR2B-containing receptors. J.Pharm.Exp.Ther. ***335*** 644. PMID: 20810618.