# **PRODUCT** INFORMATION



**TCN 201** 

Item No. 19086

CAS Registry No.:	852918-02-6
Formal Name:	4-[[[(3-chloro-4-fluorophenyl)
	sulfonyl]amino]methyl]-benzoic acid, o
	2-benzoylhydrazide
MF:	$C_{21}H_{17}CIFN_{3}O_{4}S$
FW:	
Purity:	≥95%
UV/Vis.:	$\lambda_{max}$ : 232 nm $($
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

# Laboratory Procedures

TCN 201 is supplied as a crystalline solid. A stock solution may be made by dissolving the TCN 201 in the solvent of choice, which should be purged with an inert gas. TCN 201 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of TCN 201 in these solvents is approximately 20 and 15 mg/ml, respectively.

TCN 201 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TCN 201 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TCN 201 has a solubility of approximately 0.02 mg/ml in a 1:40 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

TCN 201 is a selective antagonist of NMDA receptors containing the NR2A subunit ( $plC_{50}s = 6.8$ and <4.3 for human recombinant NR2A and NR2B, respectively).<sup>1</sup> It has been shown to bind to a novel allosteric site located at the dimer interface between the GluN1 and GluN2 binding domains, thereby reducing glycine signal transduction and inhibiting NMDA receptor function.<sup>2</sup>

# References

- 1. Bettini, E., Sava, A., Griffante, C., et al. Identification and characterization of novel NMDA receptor antagonists selective for NR2A- over NR2B-containing receptors. J. Pharmacol. Exp. Ther. 335(3), 636-644 (2010).
- 2. Hansen, K.B., Ogden, K.K., and Traynelis, S.F. Subunit-selective allosteric inhibition of glycine binding to NMDA receptors. J. Neurosci. 32(18), 6197-6208 (2012).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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