SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

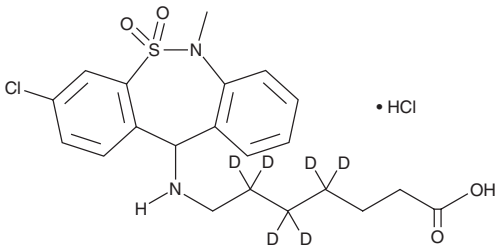
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Tianeptine-d_6 (hydrochloride)

Item No. 36800

Formal Name:	7-[(3-chloro-6,11-dihydro-6-methyl-5,5-dioxidodibenzo[c,f][1,2]thiazepin-11-yl)amino]-heptanoic-4,4,5,5,6,6-d_6 acid, monohydrochloride
MF:	$C_{21}H_{19}ClD_6N_2O_4S \bullet HCl$
FW:	479.5
Chemical Purity:	≥98% (Tianeptine)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as:	A 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

Tianeptine-d_6 (hydrochloride) is intended for use as an internal standard for the quantification of tianeptine (Item No. 17561) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Tianeptine-d_6 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the tianeptine-d_6 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Tianeptine-d_6 (hydrochloride) is soluble in methanol.

Description

Tianeptine is an atypical antidepressant.[1] It is an agonist of the μ-opioid receptor (MOR; EC_{50}s = 194 and 641 nM for human and mouse receptors, respectively, in a BRET assay for G protein activation) and also has effects on the glutamate system.[1,2] Tianeptine (30 mg/kg) decreases immobility in the forced swim test in wild-type, but not MOR knockout mice, indicating antidepressant-like activity dependent on MORs.[3] It increases locomotor activity at a dose of 30, but not 10 mg/kg, in the open field test and increases paw withdrawal latency in the hot-plate test in mice. Tianeptine modulates AMPA receptor activity by increasing phosphorylation of the AMPA receptor GluR1 subunit in the frontal cortex and hippocampal CA3 region in mice.[4] It prevents increases in glial glutamate transporter 1 (GLT-1) expression induced by chronic restraint stress in the hippocampal CA3 region in rats when administered at a dose of 10 mg/kg per day for 21 days.[5] It also reverses increases in extracellular glutamate levels induced by acute restraint stress in the basolateral nucleus of the amygdala in rats.[6]

References

1. McEwen, B.S., Chattarji, S., Diamond, D.M., *et al. Mol. Psychiatry* **15(3)**, 237-249 (2010).
2. Gassaway, M.M., Rives, M.L., Kruegel, A.C., *et al. Transl. Psychiatry* **4(7)**, e411 (2014).
3. Samuels, B.A., Nautiyal, K.M., Kruegel, A.C., *et al. Neuropsychopharmacology* **42(10)**, 2052-2063 (2017).
4. Svenningsson, P., Bateup, H., Qi, H., *et al. Eur. J. Neurosci.* **26(12)**, 3509-3517 (2007).
5. Reagan, L.P., Rossell, D.R., Wood, G.E., *et al. Proc. Natl. Acad. Sci. USA* **101(7)**, 2179-2184 (2004).
6. Reznikov, L.R., Grillo, C.A., Piroli, G.G., *et al. Eur. J. Neurosci.* **25(10)**, 3109-3114 (2007).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM