

PRODUCT INFORMATION



TFB-TBOA (hydrate)

Item No. 31417

Formal Name: (3S)-3-[[3-[[4-(trifluoromethyl)benzoyl]amino]phenyl]methoxy]-L-aspartic acid, hydrate

Synonym: CF₃-Bza-TBOA

MF: C₁₉H₁₇F₃N₂O₆ • XH₂O

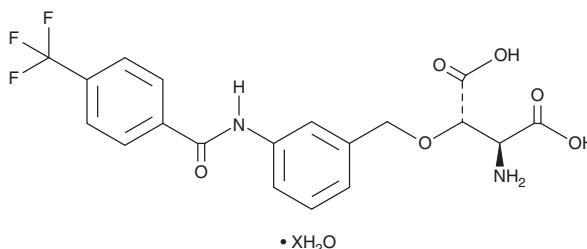
FW: 426.3

Purity: ≥98%

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

TFB-TBOA (hydrate) is supplied as a solid. A stock solution may be made by dissolving the TFB-TBOA (hydrate) in the solvent of choice, which should be purged with an inert gas. TFB-TBOA (hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 30 mg/ml.

Description

TFB-TBOA is an inhibitor of excitatory amino acid transporter 1 (EAAT1) and EAAT2 with IC₅₀ values of 22 and 17 nM for EAAT1 and EAAT2, respectively, in a glutamate uptake assay using COS-1 cells.¹ It is selective for EAAT1 and EAAT2 over EAAT3 (IC₅₀ = 300 nM), as well as the choline, dopamine, GABA, norepinephrine, and serotonin transporters and a variety of neurotransmitter receptors at 10 μM. TFB-TBOA (10 μM) inhibits L-glutamate- and L-aspartate-induced currents in *X. laevis* oocytes. It induces convulsions in mice when administered at a dose of 0.2 μg/animal.

Reference

1. Shimamoto, K., Sakai, R., Takaoka, K., *et al.* Characterization of novel L-threo-β-benzyloxyaspartate derivatives, potent blockers of the glutamate transporters. *Mol. Pharmacol.* **65**(4), 1008-1015 (2004).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/26/2023

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