

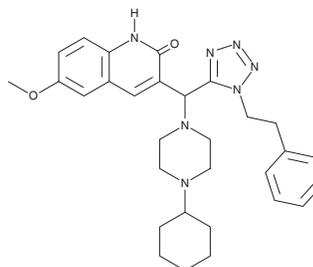
# PRODUCT INFORMATION



**GT 949**

Item No. 34552

**CAS Registry No.:** 460330-27-2  
**Formal Name:** 3-[(4-cyclohexyl-1-piperazinyl)  
[1-(2-phenylethyl)-1H-tetrazol-5-yl]  
methyl]-6-methoxy-2(1H)-quinolinone  
**MF:** C<sub>30</sub>H<sub>37</sub>N<sub>7</sub>O<sub>2</sub>  
**FW:** 527.7  
**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

GT 949 is supplied as a solid. A stock solution may be made by dissolving the GT 949 in the solvent of choice, which should be purged with an inert gas. GT 949 is soluble in organic solvents such as ethanol and DMSO. The solubility of GT 949 is approximately 10 mM in ethanol (heated) and 100 mM in DMSO.

## Description

GT 949 is a positive allosteric modulator of excitatory amino acid transporter 2 (EAAT2; EC<sub>50</sub> = 0.26 nM for stimulating glutamate uptake by COS-7 cells expressing EAAT2).<sup>1</sup> It is selective for EAAT2 over the serotonin (5-HT) transporter (SERT), the norepinephrine transporter (NET), and the dopamine transporter (DAT; IC<sub>50</sub>s = >1 mM for all). GT 949 (10 nM) reduces neuronal death induced by L-glutamate, but not hydrogen peroxide, in primary embryonic rat neuron-glia cultures.<sup>2</sup>

## References

1. Kortagere, S., Mortensen, O.V., Xia, J., *et al.* Identification of novel allosteric modulators of glutamate transporter EAAT2. *ACS Chem. Neurosci.* **9**(3), 522-534 (2018).
2. Falcucci, R.M., Wertz, R., Green, J.L., *et al.* Novel positive allosteric modulators of glutamate transport have neuroprotective properties in an *in vitro* excitotoxic model. *ACS Chem. Neurosci.* **10**(8), 3437-3453 (2019).

### 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, 11/22/2022

## 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