

Product Data Sheet

Product Name: TC-O 9311

Cat. No.: GC11522

Chemical Properties

Cas. No. 444932-31-4

Chemical Name (Z)-N'-((Z)-hydroxy(naphthalen-1-ylimino)methyl)-3,5-dimethoxybenzohydrazonic acid

SMILES COC1=CC(OC)=CC(/C(O)=N/N/C(O)=N/C2=CC=CC3=CC=CC=C32)=C1

Formula $C_{20}H_{19}N_3O_4$ M.Wt 365.38

Solubility 14mg/mL in ethanol or in DMF, 11mg/mL in DMSO
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

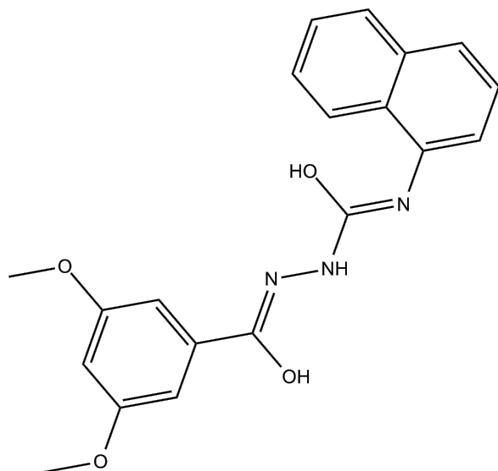
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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Structure



Background

TC-O 9311 is an agonist of the orphan G protein-coupled receptor GPR139 (EC₅₀ = 39 nM in a calcium mobilization assay).[1] It is selective for GPR139 over a panel of 90 additional targets. TC-O 9311 (1 μM) inhibits cell death induced by 1-methyl-4-phenylpyridinium (MPP⁺), but not 6-hydroxydopamine, in primary dopaminergic midbrain neurons.[2]

Reference:

- [1]. Shi, F., Shen, J.K., Chen, D., et al. Discovery and SAR of a series of agonists at orphan G protein-coupled receptor 139. *ACS Med. Chem. Lett.* 2(4), 303-306 (2011).
- [2]. Bayer Andersen, K., Leander Johansen, J., Hentzer, M., et al. Protection of primary dopaminergic midbrain neurons by GPR139 agonists supports different mechanisms of MPP⁺ and rotenone toxicity. *Front. Cell. Neurosci.* 10:164, (2016).

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