

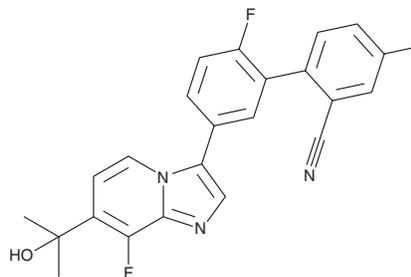
PRODUCT INFORMATION



TP-003

Item No. 43929

CAS Registry No.: 628690-75-5
Formal Name: 2',4-difluoro-5'-[8-fluoro-7-(1-hydroxy-1-methylethyl)imidazo[1,2-a]pyridin-3-yl]-1,1'-biphenyl]-2-carbonitrile
MF: C₂₃H₁₆F₃N₃O
FW: 407.4
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

TP-003 is supplied as a solid. A stock solution may be made by dissolving the TP-003 in the solvent of choice, which should be purged with an inert gas. TP-003 is soluble in organic solvents such as ethanol and DMSO. TP-003 is sparingly soluble (1-10 mg/ml) in ethanol and soluble (≥10 mg/ml) in DMSO.

Description

TP-003 is a positive allosteric modulator of the GABA_A receptor (GABA_AR).¹ It potentiates GABA-induced currents in HEK293 cells expressing $\alpha_1\beta_2\gamma_2$, $\alpha_2\beta_3\gamma_2$, $\alpha_3\beta_3\gamma_2$, or $\alpha_5\beta_2\gamma_2$ subunit-containing GABA_ARs (EC₅₀s = 20.3, 10.6, 3.2, and 5.6 nM, respectively). TP-003 (10 mg/kg) increases the number of entries into, and the time spent in, the open arms of the elevated plus maze in triple point-mutated mice in which only GABA_ARs containing the α_2 subunit are sensitive at the benzodiazepine (BDZ) site but not in mice with wild-type GABA_ARs or mice expressing only α_3 -BDZ-sensitive GABA_ARs. It also increases locomotor activity in mice expressing only α_2 -BDZ-sensitive GABA_ARs when administered at a dose of 3 mg/kg but reduces locomotor activity in mice expressing only α_1 -BDZ-sensitive GABA_ARs at 3, 10, and 30 mg/kg. TP-003 (10 mg/kg) induces muscle relaxation in mice expressing only α_3 -BDZ-sensitive GABA_ARs but not those expressing α_2 -BDZ-sensitive GABA_ARs.

Reference

1. Neumann, E., Ralvenius, W.T., Acuña, M.A., *et al.* TP003 is a non-selective benzodiazepine site agonist that induces anxiolysis via α_2 GABA_A receptors. *Neuropharmacology* **143**, 71-78 (2018).

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

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