



Certificate of Analysis

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Product Name: FTBMT Catalog No.: 6784 Batch No.: 2

CAS Number: 1358575-02-6

IUPAC Name: 4-[3-[[3-Fluoro-5-(trifluoromethyl)phenyl]methyl]-5-methyl-1*H*-1,2,4-triazol-1-yl]-2-methylbenzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{16}F_4N_4O$.

Batch Molecular Weight: 392.35

Physical Appearance: Beige solid

Solubility: DMSO to 100 mM

ethanol to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.0% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 58.16 4.11 14.28 Found 58.13 4.1 14.32

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Jun 28th 2022

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Description:

FTBMT (also known as TP 024) is a potent and selective GPR52 agonist (EC $_{50}$ = 75 nM, E $_{max}$ = 122%), which is selective for GPR52 over a panel of 98 targets including D $_{1}$, D $_{2}$, AMPA and NMDA. FTBMT suppresses methamphetamine-induced hyperlocomotion in mice, and inhibits MK-801-induced hyperactivity (model for acute psychosis), without causing catalepsy in mice. This compound is orally bioavailable and brain penetrant.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₉H₁₆F₄N₄O.

Batch Molecular Weight: 392.35 Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Nishiyama *et al* (2017) FTBMT, a novel and selective GPR52 agonist, demonstrates antipsychotic-like and procognitive effects in rodents, revealing a potential therapeutic agent for schizophrenia. J.Pharmacol.Exp.Ther. **363** 253. PMID: 28851764.

Tokumaru *et al* (2017) Design, synthesis, and pharmacological evaluation of 4-azolyl-benzamide derivatives as novel GPR52 agonists. Bioorg.Med.Chem. **25** 3098. PMID: 28433511.

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