bio-techne
TOCRIS

Print Date: Feb 19th 2024

Certificate of Analysis

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Product Name: **FTBMT** **Catalog No.: 6784** **Batch No.: 4**

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: $C_{19}H_{16}F_4N_4O$.

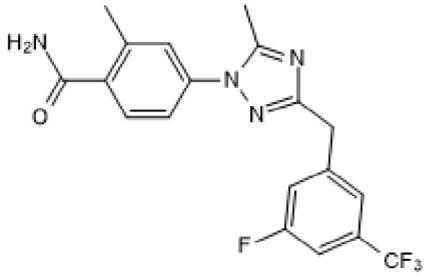
Batch Molecular Weight: 392.35

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM
ethanol to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.16	4.11	14.28
Found	58.31	4.04	14.1

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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:

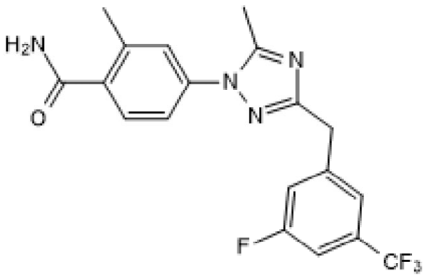
Batch Molecular Formula: $C_{19}H_{16}F_4N_4O$.

Batch Molecular Weight: 392.35

Physical Appearance: Off White 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.