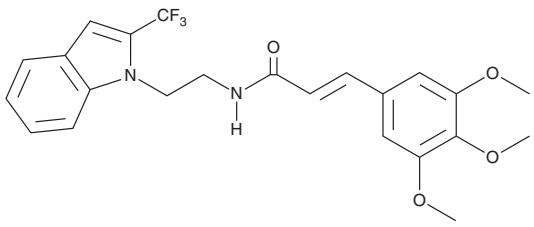
PRODUCT INFORMATION

TG6-10-1

Item No. 23444

CAS Registry No.: 1415716-58-3
Formal Name: (2E)-N-[2-[2-(trifluoromethyl)-1H-indol-1-yl]ethyl]-3-(3,4,5-trimethoxyphenyl)-2-propenamide
MF: $C_{23}H_{23}F_3N_2O_4$
FW: 448.4
Purity: ≥98%
UV/Vis.: λ_{max}: 216, 272, 300 nm
Supplied as: A crystalline 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

TG6-10-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the TG6-10-1 in the solvent of choice, which should be purged with an inert gas. TG6-10-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of TG6-10-1 in these solvents is approximately 5, 30, and 50 mg/ml, respectively.

Description

TG6-10-1 is a potent antagonist of E prostanoid receptor 2 (EP_2; K_b = 17.8 nM in C6 glioma cells overexpressing human EP_2).[1] It is 300-, 25-, and 10-fold selective for EP_2 over other prostanoid receptors, including human EP_{3-4}, FP and TP, and DP_1 receptors, respectively. TG6-10-1 is also selective for EP_2 over a panel of 40 enzymes, ion channels, receptors, and neurotransmitter transporters (IC_{50}s >10 µM). *In vivo*, TG6-10-1 increases survival, decreases weight loss, prevents induction of IL-1β, IL-6, TNF-α, and MCP-1/CCL2 mRNA, and inhibits neuronal cell death in the hippocampus in mouse and rat models of status epilepticus induced by pilocarpine (Item No. 14487) and diisopropyl fluorophosphate, respectively.[1,2]

References

1. Jiang, J., Quan, Y., Ganesh, T., *et al*. Inhibition of the prostaglandin receptor EP2 following status epilepticus reduces delayed mortality and brain inflammation. *Proc. Natl. Acad. Sci. U.S.A.* **110(9)**, 3591-3596 (2013).
2. Rojas, A., Ganesh, T., Lelutiu, N., *et al*. Inhibition of the prostaglandin EP2 receptor is neuroprotective and accelerates functional recovery in a rat model of organophosphorus induced status epilepticus. *Neuropharmacology* **93**, 15-27 (2015).

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