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%

 λ_{max} : 216, 272, 300 nm UV/Vis.: 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 (EP₂; K_b = 17.8 nM in C6 glioma cells overexpressing human EP₂).¹ It is 300-, 25-, and 10-fold selective for EP₂ over other prostanoid receptors, including human EP3-4, FP and TP, and DP1 receptors, respectively. TG6-10-1 is also selective for EP2 over a panel of 40 enzymes, ion channels, receptors, and neurotransmitter transporters (IC₅₀s >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. 12

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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

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