

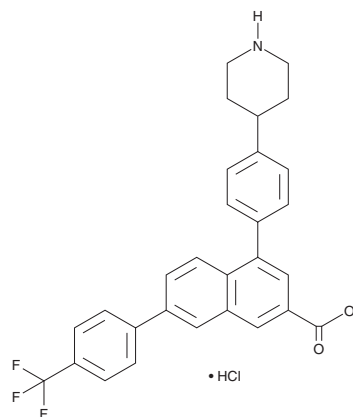
PRODUCT INFORMATION



PPTN (hydrochloride)

Item No. 36854

CAS Registry No.: 1992047-65-0
Formal Name: 4-[4-(4-piperidiny)phenyl]-7-[4-(trifluoromethyl)phenyl]-2-naphthalenecarboxylic acid, monohydrochloride
MF: C₂₉H₂₄F₃NO₂ • HCl
FW: 512.0
Purity: ≥98%
UV/Vis.: λ_{max}: 268 nm
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

PPTN (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the PPTN (hydrochloride) in the solvent of choice, which should be purged with an inert gas. PPTN (hydrochloride) is soluble in DMSO and ethanol.

Description

PPTN is an antagonist of the purinergic P2Y₁₄ receptor.¹ It inhibits forskolin-induced cyclic AMP accumulation in C6 cells expressing human P2Y₁₄ (EC₅₀ = ~10 nM) but not CHO cells expressing P2Y₁, P2Y₂, P2Y₄, P2Y₆, P2Y₁₁, P2Y₁₂, or P2Y₁₃ at 1 μM. PPTN (5 μM) inhibits UDP-glucose-induced IL-1β and chemokine (C-C motif) ligand 2 (CCL2) secretion, as well as ERK, JNK, and p38 MAPK phosphorylation in isolated rat satellite glial cells (SGCs).² Trigeminal administration of PPTN (5 and 10 μM) reduces mechanical hyperalgesia induced by complete Freund's adjuvant (CFA) in rats.³

References

1. Barrett, M.O., Sesma, J.I., Ball, C.B., *et al.* A selective high-affinity antagonist of the P2Y₁₄ receptor inhibits UDP-glucose-stimulated chemotaxis of human neutrophils. *Mol. Pharmacol.* **84**(1), 41-49 (2013).
2. Lin, J., Liu, F., Zhang, Y.-Y., *et al.* P2Y₁₄ receptor is functionally expressed in satellite glial cells and mediates interleukin-1β and chemokine CCL2 secretion. *J. Cell. Physiol.* **234**(11), 21199-21210 (2019).
3. Lin, J., Zhang, Y.-Y., Liu, F., *et al.* The P2Y₁₄ receptor in the trigeminal ganglion contributes to the maintenance of inflammatory pain. *Neurochem Int.* **131**, 104567 (2019).

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.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM