

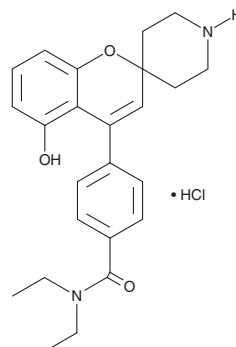
PRODUCT INFORMATION



ADL5859 (hydrochloride)

Item No. 27796

CAS Registry No.: 850173-95-4
Formal Name: N,N-diethyl-4-(5-hydroxyspiro[2H-1-benzopyran-2,4'-piperidin]-4-yl)-benzamide, monohydrochloride
MF: C₂₄H₂₈N₂O₃ • HCl
FW: 429.0
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 252 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

ADL5859 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the ADL5859 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ADL5859 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ADL5859 (hydrochloride) in these solvents is approximately 10 and 3 mg/ml, respectively.

ADL5859 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ADL5859 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ADL5859 (hydrochloride) has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ADL5859 is a δ -opioid receptor agonist ($K_i = 0.84$ nM).¹ It is selective for δ -opioid receptors over μ -opioid and κ -opioid receptors exhibiting 32 and 37% inhibition, respectively, in radioligand binding assays when used at a concentration of 10 μ M. ADL5859 (3 mg/kg) completely reverses mechanical hyperalgesia induced by complete Freund's adjuvant (CFA) in rats. It also decreases immobility time in the forced swim test in rats, indicating antidepressant-like activity.

Reference

1. Le Bourdonnec, B., Windh, R.T., Ajello, C.W., et al. Potent, orally bioavailable delta opioid receptor agonists for the treatment of pain: Discovery of N,N-diethyl-4-(5-hydroxyspiro[chromene-2,4'-piperidine]-4-yl) benzamide (ADL5859). *J. Med. Chem.* **51**(19), 5893-5896 (2008).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/02/2022

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