

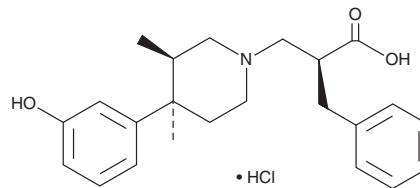
PRODUCT INFORMATION



ADL 08-0011 (hydrochloride)

Item No. 34298

CAS Registry No.: 170098-43-8
Formal Name: [3R-[1(S*),3 α ,4 α]]-4-(3-hydroxyphenyl)-3,4-dimethyl- α -(phenylmethyl)-1-piperidinepropanoic acid, monohydrochloride
MF: C₂₃H₂₉NO₃ • HCl
FW: 403.9
Purity: \geq 90%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ADL 08-0011 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the ADL 08-0011 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ADL 08-0011 (hydrochloride) is soluble in DMSO and methanol.

Description

ADL 08-0011 is an active metabolite of the μ -opioid receptor antagonist alvimopan (Item No. 23902).¹ It is produced from alvimopan *via* amide hydrolysis by gut microbiota. ADL 08-0011 is a μ -opioid receptor antagonist (K_i = 0.25 nM). It is selective for μ -opioid receptors over κ - and δ -opioid receptors ($K_{i,s}$ = 15.8 and 31.6 nM, respectively). ADL 08-0011 inhibits endomorphin 1-induced inhibition of electrically induced contraction of isolated guinea pig ileum (pA_2 = 9.4). *In vivo*, ADL 08-0011 (0.03-1 mg/kg) reverses loperamide-induced delayed gastric emptying in a rat model of castor oil-induced diarrhea.²

References

1. Beattie, D.T., Cheruvu, M., Mai, N., *et al.* The *in vitro* pharmacology of the peripherally restricted opioid receptor antagonists, alvimopan, ADL 08-0011 and methylnaltrexone. *Naunyn Schmiedebergs Arch. Pharmacol.* **375(3)**, 205-220 (2007).
2. Armstrong, S.R., Campbell, C.B., Richardson, C.L., *et al.* The *in vivo* pharmacodynamics of the novel opioid receptor antagonist, TD-1211, in models of opioid-induced gastrointestinal and CNS activity. *Naunyn Schmiedebergs Arch Pharmacol.* **386(6)**, 471-478 (2013).

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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