

Certificate of Analysis

Print Date: Dec 3rd 2024

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Product Name: (±)-ADX 71743 Catalog No.: 5715 Batch No.: 2

CAS Number: 1431641-29-0

IUPAC Name: 6-(2,4-Dimethylphenyl)-2-ethyl-6,7-dihydro-4(5*H*)-benzoxazolone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{19}NO_2$ Batch Molecular Weight:269.34Physical Appearance:White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.65$ (Ethyl acetate:Petroleum ether [33:67])

HPLC: Shows >99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 75.81 7.11 5.2 Found 75.88 7.27 5.11

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

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IUPAC Name: 6-(2,4-Dimethylphenyl)-2-ethyl-6,7-dihydro-4(5*H*)-benzoxazolone

Description:

(±)-ADX 71743 is a negative allosteric modulator at mGlu $_7$ (IC $_{50}$ = 300 nM). Blocks high frequency-induced LTP at SC-CA1 synapses in hippocampal slices in vitro. Increases evoked excitatory postsynaptic currents (eEPSCs) in mice. Brain penetrant.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₁₉NO₂ Batch Molecular Weight: 269.34 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Tassin *et al* (2016) Phasic and tonic mGlu₇ receptor activity modulates the thalamocortical network. Front Neural Circuits *10* 31. PMID: 27199672.

Klar *et al* (2015) Activation of metabotropic glutamate receptor 7 is required for induction of long-term potentiation at SC-CA1 synapses in the hippocampus. J.Neurosci. *35* 7600. PMID: 25972184.