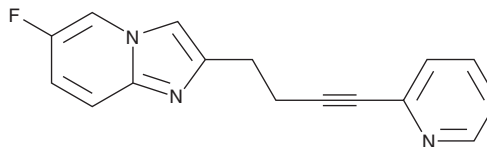


PRODUCT INFORMATION



Dipraglurant Item No. 42535

CAS Registry No.: 872363-17-2
Formal Name: 6-fluoro-2-[4-(2-pyridinyl)-3-butyne-1-yl]-imidazo[1,2-a]pyridine
Synonym: ADX-48621
MF: C₁₆H₁₂FN₃
FW: 265.3
Purity: ≥98%
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

Dipraglurant is supplied as a solid. A stock solution may be made by dissolving the dipraglurant in the solvent of choice, which should be purged with an inert gas. Dipraglurant is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

Dipraglurant is a negative allosteric modulator (NAM) of metabotropic glutamate receptor 5 (mGluR5; K_i = 21 nM).¹ It inhibits glutamate-induced calcium mobilization, inositol monophosphate (IP₁) accumulation, and ERK1/2 phosphorylation in HEK293A cells expressing rat mGluR5a (pK_Bs = 5.83, 6.5, and 6.67, respectively). Dipraglurant increases drinking in the Vogel punished drinking task, indicating anxiolytic-like activity, in rats, decreases marble burying in mice, and reduces immobility time in the forced swim test in mice (ED₅₀s = 7.4, 43, and ~30 mg/kg, respectively).² It reduces chorea and dystonia scores in a macaque model of MPTP-induced Parkinson's disease L-DOPA-induced dyskinesia (PD-LID) when administered at a dose of 30 mg/kg.³

References

1. Arsova, A., Møller, T.C., Vedel, L., *et al.* Detailed in vitro pharmacological characterization of clinically tested negative allosteric modulators of the metabotropic glutamate receptor 5. *Mol. Pharmacol.* **98**(1), 49-60 (2020).
2. Epping-Jordan, M.P., Girard, F., Bessis, A.S., *et al.* Effect of the metabotropic glutamate receptor type 5 negative allosteric modulator dipraglurant on motor and non-motor symptoms of Parkinson's disease. *Cells* **12**(7), 1004 (2023).
3. Bezard, E., Pioli, E.Y., Li, Q., *et al.* The mGluR5 negative allosteric modulator dipraglurant reduces dyskinesia in the MPTP macaque model. *Mov. Disord.* **29**(8), 1074-1079 (2014).

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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