

PRODUCT INFORMATION



Lumateperone

Item No. 45296

CAS Registry No.: 313368-91-1
Formal Name: 1-(4-fluorophenyl)-4-[(6bR,10aS)-2,3,6b,9,10,10a-hexahydro-3-methyl-1H-pyrido[3',4':4,5]pyrrolo[1,2,3-de]quinoxalin-8(7H)-yl]-1-butanone

Synonyms: ITI-007, ITI-722

MF: C₂₄H₂₆FN₃O

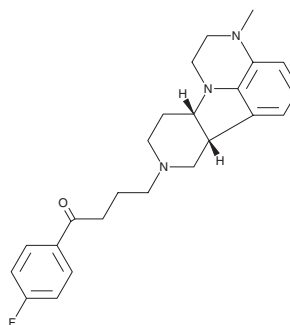
FW: 393.5

Purity: ≥98%

Supplied as: A neat oil

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Lumateperone is supplied as a neat oil. A stock solution may be made by dissolving the lumateperone in the solvent of choice, which should be purged with an inert gas. Lumateperone is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

Description

Lumateperone is an atypical antipsychotic.¹ It selectively binds to the serotonin (5-HT) receptor subtype 5-HT_{2A} over 5-HT_{1A} and 5-HT_{2C} receptors (K_is = 0.54, 1,480, and 173 nM, respectively). Lumateperone also binds to dopamine D₁, D₂, and D₄ receptors (K_is = 52, 32, and 108 nM, respectively), α_{1A}- and α_{1B}-adrenergic receptors (K_is = 73 and 31 nM, respectively), and the 5-HT transporter (SERT; K_i = 61 nM). It reduces head-twitch behavior induced by the 5-HT_{2A} agonist quipazine in rats (ED₅₀ = 0.12 mg/kg). Formulations containing lumateperone have been used in the treatment of schizophrenia.

Reference

1. Li, P., Zhang, Q., Robichaud, A.J., *et al.* Discovery of a tetracyclic quinoxaline derivative as a potent and orally active multifunctional drug candidate for the treatment of neuropsychiatric and neurological disorders. *J. Med. Chem.* **57**(6), 2670-2682 (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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