

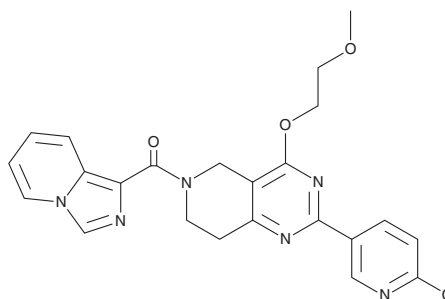
# PRODUCT INFORMATION



## THPP-1

Item No. 34219

**CAS Registry No.:** 1257051-63-0  
**Formal Name:** [2-(6-chloro-3-pyridinyl)-7,8-dihydro-4-(2-methoxyethoxy)pyrido[4,3-d]pyrimidin-6(5H)-yl]imidazo[1,5-a]pyridin-1-yl-methanone  
**MF:** C<sub>23</sub>H<sub>21</sub>ClN<sub>6</sub>O<sub>3</sub>  
**FW:** 464.9  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 221, 287 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

THPP-1 is supplied as a solid. A stock solution may be made by dissolving the THPP-1 in the solvent of choice, which should be purged with an inert gas. THPP-1 is soluble in DMSO.

### Description

THPP-1 is an inhibitor of phosphodiesterase 10A (PDE10A; K<sub>i</sub> = 1 nM).<sup>1</sup> It is selective for PDE10A over PDE1A-9A and PDE11A (K<sub>s</sub> = 44->50,000 nM for all). THPP-1 (3 mg/kg) decreases the number of avoidances in the conditioned avoidance response test in rats and reduces MK-801-induced increases in locomotor activity in mice.<sup>2</sup> It improves novel object recognition in rats when administered at doses of 0.3 and 1 mg/kg.

### References

1. Raheem, I.T., Breslin, M.J., Fandozzi, C., *et al.* Discovery of tetrahydropyridopyrimidine phosphodiesterase 10A inhibitors for the treatment of schizophrenia. *Bioorg. Med. Chem. Lett.* **22(18)**, 5903-5908 (2012).
2. Smith, S.M., Uslaner, J.M., Cox, C.D., *et al.* The novel phosphodiesterase 10A inhibitor THPP-1 has antipsychotic-like effects in rat and improves cognition in rat and rhesus monkey. *Neuropharmacology* **64**, 215-223 (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.

#### WARRANTY AND LIMITATION OF REMEDY

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