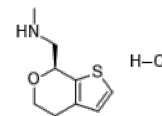


Product Name : Ulotaront hydrochloride
Cat. No. : PC-28375
CAS No. : 1310422-41-3
Molecular Formula : C₉H₁₄ClNOS
Molecular Weight : 219.73
Target : Trace Amine-associated Receptor (TAAR)
Solubility : 10 mM in DMSO



Biological Activity

Ulotaront hydrochloride (SEP-363856, SEP-856) is a psychotropic agent and selective agonist of trace amine receptor 1 (**TAAR1**) and **5-HT1A** receptor with EC₅₀ of 0.14 uM and 2.3 uM for human TAAR1 and 5-HT1A receptor respectively, shows no appreciable action at dopamine D2 receptors.

Ulotaront (SEP-363856, SEP-856) exhibits weak partial agonism with EC₅₀ values of 10.44 ± 4 µM (cAMP, E_{max} = 23.9% ± 7.6%; Fig. 2C) and 8 µM (β-arrestin recruitment, E_{max} = 27.1%) in D2 receptor functional assays.

Ulotaront (SEP-363856, SEP-856) demonstrates antipsychotic- and antidepressant-like activity without inducing catalepsy.

Ulotaront (SEP-363856, SEP-856) decreases REM sleep in rats.

Ulotaront (SEP-363856, SEP-856) does not exhibit significant occupancy at D2 receptors in nonhuman primates.

Ulotaront (SEP-363856, SEP-856) induces significant inhibitory responses in DPAT-sensitive neurons of the DRN and a subset of VTA neurons.

Ulotaront (SEP-363856, SEP-856) inhibits firing of DRN in vivo and partially attenuates PCP-induced hyperactivity through 5-HT1A receptors.

Ulotaront (SEP-363856, SEP-856) demonstrated broad efficacy in putative rodent models relating to aspects of schizophrenia, including phencyclidine (PCP)-induced hyperactivity, prepulse inhibition, and PCP-induced deficits in social interaction.

References

Dedic N, et al. *J Pharmacol Exp Ther*. 2019 Oct;371(1):1-14.

Koblan KS, et al. *N Engl J Med*. 2020 Apr 16;382(16):1497-1506.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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