

PRODUCT INFORMATION



PF-00446687

Item No. 41739

CAS Registry No.: 862281-92-3

Formal Name: [(3S,4R)-4-(2,4-difluorophenyl)-1-(1,1-dimethylethyl)-3-pyrrolidinyl][(3R,5S)-4-hydroxy-3,5-dimethyl-4-phenyl-1-piperidinyl]-methanone

Synonym: PF446687

MF: C₂₈H₃₆F₂N₂O₂

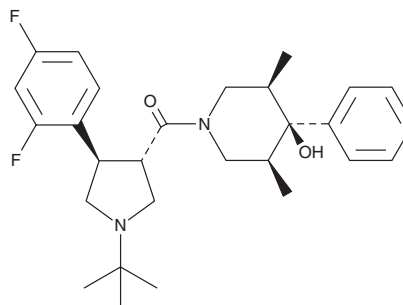
FW: 470.6

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

PF-00446687 is supplied as a solid. A stock solution may be made by dissolving the PF-00446687 in the solvent of choice, which should be purged with an inert gas. PF-00446687 is slightly soluble (0.1-1 mg/ml) in acetonitrile.

PF-00446687 is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

PF-00446687 is an agonist of melanocortin receptor 4 (MC4R).¹ It selectively activates adenylyl cyclase in HEK293 cells expressing MC4R (EC₅₀ = 0.012 μM) over HEK293 cells expressing MC1R, MC3R, or MC5R (EC₅₀s = 1.02, 1.16, and 1.98 μM, respectively). PF-00446687 (1 mg/kg per day) increases time spent huddling and in close contact with chosen partners in prairie voles.²

References

1. Lansdell, M.I., Hepworth, D., Calabrese, A., *et al.* Discovery of a selective small-molecule melanocortin-4 receptor agonist with efficacy in a pilot study of sexual dysfunction in humans. *J. Med. Chem.* **53**(8), 3183-3197 (2009).
2. Barrett, C.E., Modi, M.E., Zhang, B.C., *et al.* Neonatal melanocortin receptor agonist treatment reduces play fighting and promotes adult attachment in prairie voles in a sex-dependent manner. *Neuropharmacology* **85**, 357-366 (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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