

Product Data Sheet

Frakefamide

Cat. No.: HY-106147 CAS No.: 188196-22-7 Molecular Formula: $C_{30}H_{34}FN_5O_5$

Molecular Weight: 563.62

Sequence: Tyr-Ala-Phe(4-F)-Phe-NH2
Sequence Shortening: YA-Phe(4-F)-Phe-NH2

Target: Opioid Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

NH₂ NH₂

BIOLOGICAL ACTIVITY

Description	Frakefamide is a potent analgesic that acts as a peripheral active μ -selective receptor agonist. Frakefamide is unable to penetrate the blood-brain-barrier and enter the central nervous system ^{[1][2]} .
In Vivo	Frakefamide (LEF576) yields a dose dependent increase in morphine appropriate responding to 50% at the highest dose tested (10 µmol/kg) after infusion durations of 2 min, whereas after 15 min infusions a maximum of 25% morphine appropriate responding was occasioned at 17.5 µmol/kg ^{[1][2]} . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Modalen AO, et al. A novel molecule (frakefamide) with peripheral opioid properties: the effects on resting ventilation compared with morphine and placebo. Anesth Analg. 2005 Mar;100(3):713-7.

[2]. Swedberg MD, et al. Drug discrimination: A versatile tool for characterization of CNS safety pharmacology and potential for drug abuse. J Pharmacol Toxicol Methods. 2016 Sep-Oct;81:295-305.

Caution: Product has not been fully validated for medical applications. For research use only.

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