BRING THIS TO YOUR DOCTOR · GREY PEPTIDES

Neuropeptide FF (NPFF)

Also called: NPFF; Neuropeptide-FF; F8Famide; FLFQPQRF-amide

What it is

Neuropeptide FF (NPFF) is an endogenous RFamide octapeptide (Phe-Leu-Phe-Gln-Pro-Gln-Arg-Phe-amide) cut from the pro-NPFF-A precursor alongside neuropeptide AF, signalling through NPFFR1 (GPR147) and NPFFR2 (GPR74). It is the classic ‘anti-opioid’ peptide — it opposes morphine’s acute effects, is linked to opioid tolerance and dependence and reduces morphine reward (PMIDs 9593588, 17884254) — and it also modulates pain by route, autonomic and neuroendocrine function (PMID 16517015) and feeding (PMIDs 23291266, 34534716). It is a research peptide, not an approved medicine, and has never been given to people as a treatment.

Approval status

Research Chemical. Not a drug: Drugs@FDA and the openFDA label endpoint hold no record, and FDA GSRS and ChEMBL hold no substance record for neuropeptide FF (searched November 6, 2026). It is an endogenous human peptide; there is no therapeutic development of NPFF itself, and no registered interventional trial of giving it to people. It is studied as an anti-opioid and metabolic peptide, and its receptors (NPFFR1 / NPFFR2) as potential drug targets, which remain preclinical.

Dosing, as printed in the page’s Recommended Dosing box

No established human dose

Neuropeptide FF is an endogenous human peptide that has never been given to people as a treatment. The human evidence is its presence in brain, spinal cord and plasma; the functional studies are in animals and cells, where it is injected into the brain or spinal fluid at experimental amounts that do not carry over to people.

Educational information, not medical advice. None is a recommendation for you. An unapproved compound has no established safe or effective human dose, and products sold for “research use only” are not made or tested for people. Talk to a doctor before acting on anything on this site, including before you start, stop or change any medicine or dose.

Key human evidence

No human study is carded on the page; its 6 study cards are reviews, animal or cell work. The first 2:

• **Neuropeptide FF, pain and analgesia** (Review, 1998). A review of NPFF (and neuropeptide AF) as anti-opioid peptides. Injected above the spinal cord, NPFF lowers the pain threshold and reverses morphine analgesia, and immuno-neutralizing it increases opioid analgesia; injected into the spinal fluid, NPFF analogs instead give long-lasting, opioid-dependent analgesia and potentiate morphine. The review frames NPFF as a neuromodulatory system interacting with opioids in the control of pain transmission. **PMID 9593588**

• **NPFF/NPVF distribution and energy homeostasis** (Review, 2021). A review of neuropeptide FF and the related neuropeptide VF (NPVF), both RFamide peptides signalling through NPFFR1 and NPFFR2. Alongside their established roles in nociception, locomotion, reproduction and stress, the review highlights a newer major role in the control of energy homeostasis and food intake, and surveys where the peptides and receptors sit in central and peripheral tissues — framing the system as a possible target in obesity or anorexia. **PMID 34534716**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 6, 2026, 31 records) found none in people. That is not evidence that it is safe to combine with anything.

Side effects and cautions

Reported side effects	Contraindications and cautions
• No human adverse-event data exist: no published study has administered neuropeptide FF to people • In animals, central NPFF opposes opioid analgesia and can precipitate a withdrawal-like syndrome in morphine-tolerant rats (PMID 9593588) — an anti-opioid action, not a safety profile • Central NPFF can raise blood pressure and alter autonomic function (PMID 16517015), so systemic effects would be expected if it were administered • Material sold online as ‘neuropeptide FF’ or ‘NPFF’ is an unregulated research chemical of unverified content	• Not a medicine: no FDA application or label, and no approval anywhere • No human dosing, interaction, pregnancy or long-term safety data exist for administered NPFF • It is a laboratory research peptide, not a treatment • Its anti-opioid action means it could counteract opioid analgesia — a research finding, not a use

Five questions to ask

1. Neuropeptide FF (NPFF) is listed here as “Research Chemical”. What does the evidence on this sheet mean for someone in my situation, and is there an approved treatment I should consider instead?
2. Here are the medicines and supplements I take. Do any of them interact with Neuropeptide FF (NPFF)? This sheet records none published, which does not mean none exist.
3. Which side effects should make me stop and call you, for example no human adverse-event data exist: no published study has administered neuropeptide ff to people?
4. Do any of the cautions on this sheet apply to me, such as: Not a medicine: no FDA application or label, and no approval anywhere?
5. What should we check before I start and while I am on it (blood tests, blood pressure, weight), and how often?

Grey Peptides is a vendor-neutral encyclopedia: it sells nothing and names no seller. This sheet is educational, not medical advice, and is not a prescription.