BRING THIS TO YOUR DOCTOR · GREY PEPTIDES

Neuropeptide AF (NPAF)

Also called: Neuropeptide AF; NPAF; Neuropeptide-AF; A-18-Famide

What it is

Neuropeptide AF (NPAF) is an amidated 18-amino-acid RFamide peptide (human sequence AGEGLNSQFWSLAAPQRF-NH2) cut from the same NPFF precursor gene as neuropeptide FF, and acting on the shared NPFF receptors NPFF-R1 and NPFF-R2 (PMID 12767123). It is part of the body's 'anti-opiate' pain-modulating system, reduces food intake in rodents and birds through the hypothalamic melanocortin system (PMIDs 34023535, 21147172), and activates the HPA stress axis with anxiety-like and antidepressant-like effects in animals (PMIDs 19269292, 25116251). It is an endogenous 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 AF (searched November 6, 2026). It is an endogenous neuropeptide; there is no therapeutic development of NPAF itself, and no registered interventional trial of giving it to people. It is studied as an RFamide anti-opiate peptide and a modulator of appetite, the stress axis and behaviour, which remains preclinical.

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

No established human dose

Neuropeptide AF is an endogenous peptide that has never been given to people as a treatment. The work is in animals and cells, where NPAF is injected into the brain 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:

• **The structure of neuropeptide AF** (In Vitro, 2003). NMR structure determination of human NPAF (sequence AGEGLNSQFWSLAAPQRF-NH2), a pain-modulating and anti-opiate peptide acting at an orphan G-protein-coupled receptor. In both a membrane-mimetic micelle and a trifluoroethanol/water system the peptide was mainly alpha-helical through its centre (Asn6-Ala14) with a random N-terminus; the C-terminal tetrapeptide formed a turn and was shown to be important for receptor recognition (a structural study). **PMID 12767123**

• **NPAF acts on intestinal mucosal mast cells** (In Vitro, 2018). In murine bone-marrow-derived mucosal mast cells, NPAF induced a slow 'piecemeal' degranulation (measured by a beta-hexosaminidase assay, mast-cell protease ELISA, electron microscopy and calcium imaging). The mast cells and enteric neurons expressed the NPFF precursor and candidate receptors, but knocking out two Mas-related receptors did not block the effect, so the response was receptor-independent — positioning NPAF as a possible mediator in nerve-immune communication in the gut (a cell study). **PMID 29346716**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 6, 2026, 2 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 NPAF to people • In animals, centrally given NPAF raises stress hormones and produces anxiety-like behaviour (PMID 19269292) and reduces food intake (PMIDs 34023535, 21147172) — preclinical signals, not a human safety profile • It modulates pain and opioid analgesia as part of the 'anti-opiate' RFamide system, which is why its interactions with opioids are studied in animals • Material sold online as 'neuropeptide AF' 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 NPAF • It is a laboratory research peptide, not a treatment • Its activation of the stress axis and anxiety-like effects in animals warrant caution in any use

Five questions to ask

1. Neuropeptide AF (NPAF) 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 AF (NPAF)? 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 npaf 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.