BRING THIS TO YOUR DOCTOR · GREY PEPTIDES

Phoenixin

Also called: Phoenixin-14; PNX-14; Phoenixin-20; PNX-20; SMIM20; C4orf52

What it is

Phoenixin (PNX-14 and PNX-20) is an endogenous neuropeptide cut from the SMIM20 precursor that acts on the orphan receptor GPR173. In the hypothalamus it potentiates GnRH-driven luteinizing-hormone release and raises kisspeptin (PMID 29671415); animal and cell work links it to feeding, anxiety, memory, vasopressin release and cell protection. Human studies measure its blood levels — higher in PCOS (PMID 37140302), lower in type 2 diabetes (PMID 38213155). It is a research peptide, not an approved medicine, and has never been given to people in a published trial.

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 phoenixin (searched November 5, 2026). It is an endogenous human neuropeptide with no therapeutic development and no registered interventional trial; its human literature is observational.

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

No established human dose

Phoenixin is an endogenous peptide that has never been given to people as a treatment. The human studies carded here only measured how much phoenixin circulates in blood (for example in polycystic ovary syndrome and type 2 diabetes), not what happens when it is administered, and no regulator has approved any dose.

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

The 2 human studies carded on the page (6 study cards in all):

• **Blood phoenixin-14 in polycystic ovary syndrome** (Human, 2023). In 50 women with polycystic ovary syndrome (PCOS) and 30 controls, serum phoenixin-14 measured by ELISA was significantly higher in the PCOS groups than in matched non-PCOS women, both lean and overweight, and rose roughly three-fold with higher body-mass index. PNX-14 correlated positively with BMI, insulin resistance (HOMA-IR), luteinizing hormone and testosterone, tying the peptide to the reproductive and metabolic features of PCOS. An observational levels study, not a trial of giving phoenixin. **PMID 37140302**

• **Phoenixin levels in type 2 diabetes** (Human, 2024). A case-control study of 36 people with type 2 diabetes and 36 healthy controls measured serum phoenixin-14 and phoenixin-20 by ELISA. Both were significantly lower in the diabetes group, and both fell as body-mass index, fasting glucose, HbA1c and insulin resistance rose. The authors suggested phoenixin might serve as a marker related to the development of type 2 diabetes. Again an observational study of circulating levels, not an intervention. **PMID 38213155**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 5, 2026, 1 record) 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 phoenixin to people • Human research measures its circulating levels only (PMIDs 37140302, 38213155) • Animal effects are dose- and route-specific (e.g. brain injection, gavage) and not transferable to people • Material sold online as "phoenixin" 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 • It is a laboratory research peptide, not a treatment for PCOS, diabetes or any condition • Altered blood levels in disease are associations, not evidence that taking phoenixin helps

Five questions to ask

1. Phoenixin 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 Phoenixin? 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 phoenixin 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.