BRING THIS TO YOUR DOCTOR · GREY PEPTIDES

Prokineticin 2

Also called: PROK2; Bv8; Prokineticin-2; PK2

What it is

Prokineticin 2 (PROK2), also called Bv8, is an endogenous ~81-amino-acid AVIT-family neuropeptide that signals through the receptors PROKR1 and PROKR2. In people, loss-of-function mutations in PROK2 or PROKR2 cause Kallmann syndrome — disrupted GnRH-neuron migration with absent puberty and reduced smell (PMIDs 21037178, 40498399). The pathway also carries the circadian rhythm, guides neurogenesis (PMID 31132148), and tunes feeding, pain and mood (PMIDs 33932486, 19544013). It is a research peptide and drug target, 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 prokineticin 2 (searched November 6, 2026). It is an endogenous human peptide; there is no therapeutic development of PROK2 itself, and no registered interventional trial of giving it to people. Its receptors (PROKR1 / PROKR2) are studied as drug targets with agonists and antagonists, which remain preclinical.

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

No established human dose

Prokineticin 2 is an endogenous human peptide that has never been given to people as a treatment. The human evidence is genetic (mutations that cause Kallmann syndrome) and observational (blood levels), not administration; the interventional work is in animals and cells.

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):

• **PROK2/PROKR2 variants in a human biobank cohort** (Human, 2025). Carriers of rare PROK2/PROKR2 variants (25 carriers, 24 controls) recalled from a large hospital biobank underwent detailed evaluation. Male variant carriers were more likely to have sought fertility evaluation, and carriers of a common founder PROKR2 variant were more likely to have lower-gastrointestinal problems — a novel association fitting prokineticin 2's known role in intestinal smooth-muscle function. The study confirmed the reproductive link and added a gastrointestinal one in the general population. **PMID 40498399**

• **PROKR2 and mood disorders** (Human, 2009). A case-control study in a Japanese population (151 bipolar, 319 major-depressive and 340 control subjects) found a significant association between the prokineticin 2 receptor gene (PROKR2) and both major depressive disorder and bipolar disorder, consistent with animal data linking PROK2 and its receptor to circadian and sleep regulation. The authors noted the sample was small and called for replication — an association, not proof of cause. **PMID 19544013**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 6, 2026, 6 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 prokineticin 2 to people • In people, loss-of-function mutations in PROK2 or PROKR2 cause Kallmann syndrome — absent puberty and reduced smell (PMIDs 21037178, 40498399) • The pathway influences pain, mood, feeding and blood-vessel growth, so its receptors are studied as drug targets in both directions (PMIDs 19544013, 33932486) • Material sold online as 'prokineticin 2' or 'Bv8' 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 PROK2 • It is a laboratory research peptide and drug target, not a treatment • Its genetics in disease are a map of its biology, not a reason to take it

Five questions to ask

1. Prokineticin 2 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 Prokineticin 2? 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 prokineticin 2 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.