Alamandine

Also called: Alamandine; Ala-angiotensin-(1-7); [Ala1]-angiotensin-(1-7); Ala-Arg-Val-Tyr-Ile-His-Pro

What it is

Alamandine is a renin-angiotensin-system heptapeptide (Ala-Arg-Val-Tyr-Ile-His-Pro, [Ala1]-angiotensin-(1-7)) of the protective arm, discovered in 2013 and found in human blood, acting through the MrgD receptor rather than the Mas receptor of angiotensin-(1-7) (PMID 24389733). In animal studies it vasodilates via nitric oxide and is anti-fibrotic, anti-inflammatory and antioxidant in the heart (PMID 33124885), arteries (PMID 30737255), liver (PMID 32227122) and brain (PMID 35125076). It is a research peptide and cardioprotective lead, 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 drug record for alamandine (searched November 7, 2026). It is an endogenous RAS peptide; there is no therapeutic development of alamandine itself and no registered interventional trial of giving it to people. It is studied as the newest protective-arm RAS peptide and a cardioprotective/anti-fibrotic lead, which remains preclinical.

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

No established human dose

Alamandine is an endogenous peptide that has never been given to people as a treatment. The work is in animals and cells, where it is given orally, by infusion or directly into tissue 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:

• **Alamandine: a new member of the angiotensin family (review)** (Review, 2014). A review introducing alamandine as a new derivative of angiotensin-(1-7) within the RAS: it is generated from angiotensin A via ACE2 or directly from Ang-(1-7), acts through the Mas-related receptor MrgD, and is a vasoactive peptide with protective actions similar to Ang-(1-7) — a counter-regulatory mechanism within the renin-angiotensin system. **PMID 24389733**

• **Oral alamandine improves cardiac remodeling after aortic constriction (mice)** (Animal, 2020). In mice with pressure-overloaded hearts from transverse aortic constriction, oral alamandine for 14 days reduced myocyte hypertrophy, collagen deposition and the expression of MMP-2 and TGF-beta, normalised ERK1/2 and AMPK signalling and increased phospholamban phosphorylation — reinforcing a cardioprotective role against pressure-overload remodeling (a preclinical result). **PMID 33124885**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 7, 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 alamandine to people • In animals it is protective — vasodilating, anti-fibrotic, anti-inflammatory and antioxidant (PMIDs 33124885, 32227122) — but these are preclinical signals, not a human safety profile • As a blood-pressure-lowering vasodilator, excessive or combined blood-pressure effects would be the expected pharmacological caution in any use — a class inference, not human data for this peptide • Material sold online as 'alamandine' 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 alamandine • It is a laboratory research peptide, not a treatment • Its blood-pressure-lowering action warrants caution about hypotension in any hypothetical use

Five questions to ask

1. Alamandine 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 Alamandine? 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 alamandine 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.