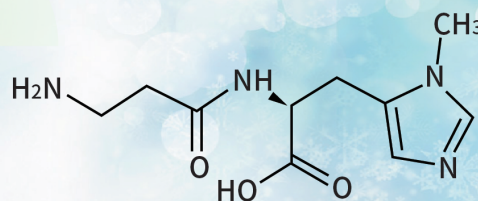


L-Anserine

CAS No.: 584-85-0

Molecular Formula: C₁₀H₁₆N₄O₃

Molecular Weight: 240.26



Description

Anserine is a natural dipeptide composed of β -alanine and 1-methyl-L-histidine, with significantly higher stability than carnosine. Widely present in animal muscle, it exhibits antioxidant and anti-glycation properties while regulating uric acid metabolism, targeting core mechanisms of chronic diseases.

Specification

L-Anserine 98% HPLC

Functions

1. Uric Acid Metabolism Regulation & Gout Management

- Inhibits uric acid production: Competitively inhibits xanthine oxidase (XO) activity ($IC_{50}=12\mu M$), blocking purine-to-uric acid conversion.
- Promotes uric acid excretion: Activates renal ABCG2 efflux pumps and inhibits URAT1 reabsorption.

2. Potent Antioxidation & Anti-aging

- Free radical scavenging: Hydroxyl radical ($\cdot OH$) scavenging $IC_{50}=12\mu M$, ORAC value up to 100,000 μmol TE/100g.
- Metal chelation: Inhibits Fe^{2+}/Cu^{2+} -induced Fenton reaction, reducing DNA oxidative damage.

3. Anti-glycation & Diabetic Complications Prevention

- Inhibits AGEs formation: Captures α,β -unsaturated aldehyde intermediates to reduce advanced glycation end products (AGEs).
- Repairs collagen: Improves vascular elasticity damaged by AGEs cross-linking.

Advantages

1. Natural & safe uric acid management: The only clinically validated natural dipeptide for bidirectional uric acid regulation (promoting excretion + inhibiting production), free from hepatorenal toxicity or gastrointestinal side effects of traditional drugs (e.g., allopurinol, colchicine).

2. Multi-target synergy: Combines antioxidation, anti-inflammation, and anti-glycation, addressing core pathways of aging-related diseases (diabetes, Alzheimer's, cardiovascular diseases). Reduces lactic acid accumulation and extends exercise endurance.

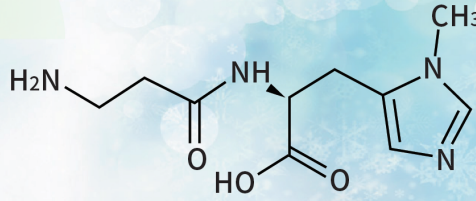
3. Superior bioavailability: Reaches peak plasma concentration ($C_{max}=2.5\mu g/mL$) within 2 hours after oral administration, with $\geq 90\%$ bioavailability—significantly higher than carnosine (60%).

鹅肌肽

CAS号: 584-85-0

化学式: $C_{10}H_{16}N_4O_3$

分子式: 240.26g/mol



描述

鹅肌肽是由β-丙氨酸和L-组氨酸组成的天然二肽, 稳定性显著优于普通肌肽, 在动物肌肉中广泛存在, 抗氧化、抗糖基化, 同时调节尿酸代谢, 覆盖慢性病核心机制。

规格

鹅肌肽98% HPLC

功能

1) 调节尿酸代谢与痛风管理:

抑制尿酸生成: 竞争性抑制黄嘌呤氧化酶(XO)活性($IC_{50}=12\mu M$), 阻断嘌呤向尿酸转化
促进尿酸排泄: 激活肾脏ABC G2外排泵并抑制URAT1重吸收临床证据:

2) 强效抗氧化与抗衰老

自由基清除: 羟基自由基($\cdot OH$)清除率 $IC_{50}=12\mu M$, ORAC值达10万 $\mu mol TE/100g$ 。

金属螯合: 抑制 Fe^{2+}/Cu^{2+} 诱导的Fenton反应, 减少DNA氧化损伤

3) 抗糖基化与糖尿病并发症预防

抑制AGEs形成: 捕获 α, β -不饱和醛类中间体, 减少晚期糖基化终产物(AGEs)生成。

修复胶原蛋白: 改善AGEs交联导致的血管弹性下降

优势

天然安全的尿酸管理方案: 唯一经临床验证的天然二肽, 双向调节尿酸(促排泄+抑生成), 无传统药物(如别嘌醇、秋水仙碱)的肝肾毒性或胃肠道副作用

多靶点协同效应: 抗氧化+抗炎+抗糖基化, 覆盖衰老相关疾病(糖尿病、阿尔茨海默病、心血管疾病)的核心病理机制。减少乳酸堆积, 延长力竭运动时间

生物利用度优势: 口服后2小时达血药浓度峰值($C_{max}=2.5\mu g/mL$), 生物利用度 $\geq 90%$, 显著高于肌肽(60%)。