

GRF (1-29) amide (rat)

Cat. No.:	HY-P1155
CAS No.:	91826-20-9
Molecular Formula:	C ₁₅₅ H ₂₅₁ N ₄₉ O ₄₀ S
Molecular Weight:	3473.08
Sequence:	His-Ala-Asp-Ala-Ile-Phe-Thr-Ser-Ser-Tyr-Arg-Arg-Ile-Leu-Gly-Gln-Leu-Tyr-Ala-Arg-Lys-Leu-Leu-His-Glu-Ile-Met-Asn-Arg-NH ₂ HADAIFTSSYRRILGQLYARKLLHEIMNR-NH₂
Sequence Shortening:	HADAIFTSSYRRILGQLYARKLLHEIMNR-NH ₂
Target:	Others
Pathway:	Others
Storage:	Sealed storage, away from moisture Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

H₂O : 16.67 mg/mL (4.80 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	0.2879 mL	1.4396 mL	2.8793 mL
5 mM	---	---	---
10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

GRF (1-29) amide (rat) is a synthetic peptide which can stimulate the growth hormone (GH) secretion.

In Vivo

Time course studies of GRF (1-29) amide (rat) disappearance show apparent half-lives of 18±4 min and 13±3 min in serum and liver homogenate, respectively. This is accompanied by the appearance of degradation products that are all less hydrophobic than the native peptide. In the serum, two major metabolites are detected and isolated by preparative HPLC^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay ^[1]

To isolate GRF metabolites in the liver, rGRF(1-29)NH₂ (10 mg) is first preincubated in 232 mL of Krebs' buffer (5 min, 37°C) to help GRF solubilization and then incubated with a liver homogenate in a shaking bath at 37°C. The homogenate is prepared as in the degradation assays with 580 mg of liver (10 mg/mL). The reaction is stopped after 30 min by adding 174 mL of cold 50 mM phosphate solution (pH 0.8) and centrifugation (48,000×g, 20 min, 4°C). The supernatant is filtered twice and its pH is adjusted (3.0) with 6 N NaOH before chromatography. The GRF metabolites and residual rGRF(1-29)NH₂ are isolated^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Environ Sci Technol. 2021 Jun 1.

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REFERENCES

[1]. Boulanger L, et al. Catabolism of rat growth hormone-releasing factor(1-29) amide in rat serum and liver. Peptides. 1992 Jul-Aug;13(4):681-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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