



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

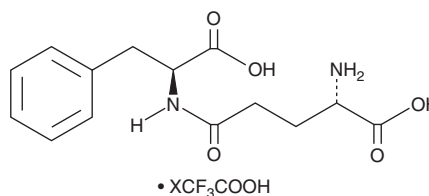
PRODUCT INFORMATION



γ -Glu-Phe (trifluoroacetate salt)

Item No. 36181

Formal Name: L- γ -glutamyl-L-phenylalanine, trifluoroacetate salt
Synonym: γ -Glutamylphenylalanine
MF: C₁₄H₁₈N₂O₅ • XCF₃COOH
FW: 294.3
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

γ -Glu-Phe (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the γ -Glu-Phe (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. γ -Glu-Phe (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of γ -Glu-Phe (trifluoroacetate salt) in these solvents is approximately 3 and 2 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of γ -Glu-Phe (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of γ -Glu-Phe (trifluoroacetate salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

γ -Glu-Phe is an endogenous dipeptide that is composed of L-glutamic acid (Item No. 30377) and L-phenylalanine (Item No. 31498) and has also been found in *Allium*.¹ It prevents increases in lipid accumulation in AML12 hepatocytes stimulated with oleic acid (Item Nos. 90260 | 24659) when used at a concentration of 30 μ M. γ -Glu-Phe (2.5-10 mM) increases levels of the calcium-sensing receptor (CaSR) and secretion of cholecystokinin (CCK) and glucagon-like peptide 1 (GLP-1) in STC-1 enteroendocrine cells.² Changes in urine levels of γ -Glu-Phe are associated with hypertension and phenylketonuria (PKU) and changes in serum levels are associated with prostate cancer.³⁻⁵

References

1. Lee, Y.G., Cho, J.-Y., Hwang, E.J., *et al.* Glu-Phe from onion (*Allium Cepa* L.) attenuates lipogenesis in hepatocytes. *Biosci. Biotech. Biochem.* **81(7)**, 1409-1416 (2017).
2. Yang, J., Bai, W., Zeng, X., *et al.* γ -[Glu]_(n=1,2)-Phe/-Met/-Val stimulates gastrointestinal hormone (CCK and GLP-1) secretion by activating the calcium-sensing receptor. *Food Funct.* **10(7)**, 4071-4080 (2019).
3. Shi, M., He, J., Li, C., *et al.* Metabolomics study of blood pressure salt-sensitivity and hypertension. *Nutr. Metab. Cardiovasc. Dis.* **32(7)**, 1681-1692 (2022).
4. Peck, H. and Pollitt, R.J. The occurrence of γ -glutamylphenylalanine in the urine of newborn phenylketonurics. *Clin. Chim. Acta* **94(3)**, 237-240 (1979).
5. Huang, J., Mondul, A.M., Weinstein, S.J., *et al.* Serum metabolomic profiling of prostate cancer risk in the prostate, lung, colorectal, and ovarian cancer screening trial. *Br. J. Cancer* **115(9)**, 1087-1095 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM