



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



Neuropeptide S (human) (acetate)

Item No. 24550

Formal Name:	L-seryl-L-phenylalanyl-L-arginyl-L-asparaginyglycyl-L-valylglycyl-L-threonylglycyl-L-methionyl-L-lysyl-L-lysyl-L-threonyl-L-seryl-L-phenylalanyl-L-glutaminy-L-arginyl-L-alanyl-L-lysyl-L-serine, acetate	H—Ser—Phe—Arg—Asn—Gly—Val—Gly—Thr—Gly—Met— Lys—Lys—Thr—Ser—Phe—Gln—Arg—Ala—Lys—Ser—OH
Synonym:	NPS	
MF:	$C_{93}H_{155}N_{31}O_{28}S \cdot XC_2H_4O_2$	• XCH_3CO_2H
FW:	2,187.5	
Purity:	≥95%	
Supplied as:	A lyophilized powder	
Storage:	-20°C	
Stability:	≥2 years	

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

Laboratory Procedures

Neuropeptide S (human) (acetate) is supplied as a lyophilized powder. A stock solution may be made by dissolving the neuropeptide S (human) (acetate) in water. The solubility of neuropeptide S (human) (acetate) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Neuropeptide S is a neuropeptide expressed in the brain, primarily in glutamatergic neurons near the locus coeruleus and in the trigeminal sensory nucleus, as well as in neurons of the lateral parabrachial nucleus in rat brain.¹ It is an agonist of the neuropeptide S receptor (NPSR) with an EC_{50} value of 9.4 nM for the human peptide to induce intracellular calcium mobilization in HEK293 cells expressing the human receptor.² Neuropeptide S (0.1-1 nmol), administered either intracerebroventricularly or into the paraventricular nucleus (PVN) of the hypothalamus, increases plasma adrenocorticotrophic hormone (ACTH) and corticosterone levels in rats.³ Administration into the PVN also decreases food intake in the hour following doses of 0.1, 0.3, and 1 nmol. Neuropeptide S decreases anxiety-like and fear behaviors in rodents, decreasing defensive burying in rats, increasing the time mice spend in the open arms of the elevated plus maze, and enhancing contextual fear extinction in mice.^{4,5}

References

1. Xu, Y.-L., Gall, C.M., Jackson, V.R., *et al.* Distribution of neuropeptide S receptor mRNA and neurochemical characteristics of neuropeptide S-expressing neurons in the rat brain. *J. Comp. Neurol.* **500(1)**, 84-102 (2007).
2. Xu, Y.-L., Reinscheid, R.K., Huitron-Resendiz, S., *et al.* Neuropeptide S: A neuropeptide promoting arousal and anxiolytic-like effects. *Neuron* **43(4)**, 487-497 (2004).
3. Smith, K.L., Patterson, M.L., Dhillo, W.S., *et al.* Neuropeptide S stimulates the hypothalamo-pituitary-adrenal axis and inhibits food intake. *Endocrinology* **147(7)**, 3510-3518 (2006).
4. Vitale, G., Filaferro, M., Ruggieri, V., *et al.* Anxiolytic-like effect of neuropeptide S in the rat defensive burying. *Peptides* **29(12)**, 2286-2291 (2008).
5. Jüngling, K., Seidenbecher, T., Sosulina, L., *et al.* Neuropeptide S-mediated control of fear expression and extinction: Role of intercalated GABAergic neurons in the amygdala. *Neuron* **59(2)**, 298-310 (2008).

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, 09/03/2019

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