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

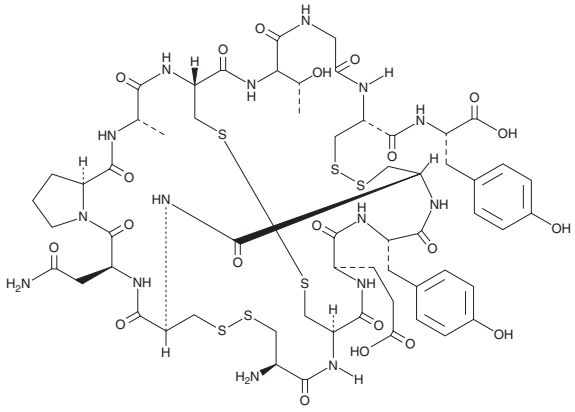
www.szabo-scandic.com

linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Linaclotide

Item No. 24085



CAS Registry No.:	851199-59-2
Formal Name:	L-cysteinyl-L-cysteinyl-L-α-glutamyl-L-tyrosyl-L-cysteinyl-L-cysteinyl-L-asparaginyl-L-prolyl-L-alanyl-L-cysteinyl-L-threonylglycyl-L-cysteinyl-L-tyrosine, cyclic (1→6),(2→10),(5→13)-tris(disulfide)
MF:	$C_{59}H_{79}N_{15}O_{21}S_6$
FW:	1,526.7
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years

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

Laboratory Procedures

Linaclotide is supplied as a solid. A stock solution may be made by dissolving the linaclotide in the solvent of choice, which should be purged with an inert gas. Linaclotide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of linaclotide in these solvents is approximately 30 mg/ml.

Linaclotide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, linaclotide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Linaclotide has a solubility of approximately 0.20 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Linaclotide is a peptide agonist of the guanylate cyclase C receptor (K_i = 16.4 nM in a radioligand binding assay using mouse intestinal mucosa).[1] Luminal exposure to 5 µg of linaclotide stimulates fluid secretion and cGMP concentration in jejunal loops isolated from wild-type mice but not guanylate cyclase C receptor-null mice. Linaclotide (100 µg/kg) increases intestinal transit rate in wild-type mice. It also reduces the number of phosphorylated ERK-positive dorsal horn neurons in the thoracolumbar spinal cord, a marker of nociceptive signaling, following noxious colorectal distension and mechanical hypersensitivity in a mouse model of TNBS-induced colitis.[2] Formulations containing linaclotide have been used for the treatment of constipation and pain associated with irritable bowel syndrome.

References

1. Bryant, A.P., Busby, R.W., Bartolini, W.P., *et al.* Linaclotide is a potent and selective guanylate cyclase C agonist that elicits pharmacological effects locally in the gastrointestinal tract. *Life Sci.* **86(19-20)**, 760-765 (2010).
2. Castro, J., Harrington, A.M., Hughes, P.A., *et al.* Linaclotide inhibits colonic nociceptors and relieves abdominal pain via guanylate cyclase-C and extracellular cyclic guanosine 3',5'-monophosphate. *Gastroenterology* **145(6)**, 1334-1346 (2013).

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