

# PRODUCT INFORMATION



## Litorin (trifluoroacetate salt)

Item No. 34427

**Formal Name:** 5-oxo-L-prolyl-L-glutamyl-L-tryptophyl-L-alanyl-L-valylglycyl-L-histidyl-L-phenylalanyl-L-methioninamide, trifluoroacetate salt

**Synonyms:** pyroGlu-Gln-Trp-Ala-Val-Gly-His-Phe-Met-NH<sub>2</sub>, Pyr-EQWAVGHFM-NH<sub>2</sub>

**MF:** C<sub>51</sub>H<sub>68</sub>N<sub>14</sub>O<sub>11</sub>S • XCF<sub>3</sub>COOH  
**FW:** 1,085.2

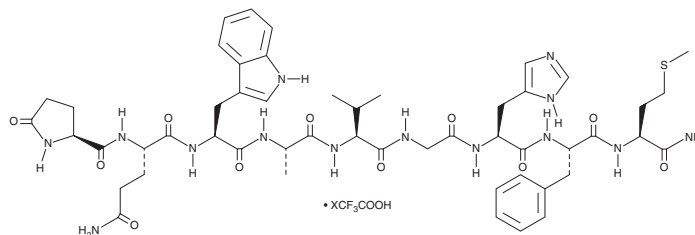
**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Synthetic



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

### Laboratory Procedures

Litorin (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the litorin (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

### Description

Litorin is a peptide originally isolated from *L. aurea* that has diverse biological activities.<sup>1-4</sup> It is an agonist of the gastrin-releasing peptide receptor (GRPR) and the neuromedin B (NMB) receptor in BALB/c 3T3 fibroblasts expressing the human receptors (EC<sub>50</sub>s = 0.44 and 0.03 nM, respectively) and binds to frog bombesin receptor subtype 4 (BB4) in CHO-K1 cells (K<sub>i</sub> = 1.2 nM).<sup>2,3</sup> Litorin (10-100 ng/kg) induces contractions of isolated guinea pig gallbladder.<sup>4</sup> It decreases food intake in rats when administered at doses ranging from 4 to 128 µg/kg.<sup>1</sup>

### References

1. Kulkosky, P.J. and Gibbs, J. Litorin suppresses food intake in rats. *Life Sci.* **31(7)**, 685-692 (1982).
2. Uehara, H., González, N., Sancho, V., *et al.* Pharmacology and selectivity of various natural and synthetic bombesin related peptide agonists for human and rat bombesin receptors differs. *Peptides* **32(8)**, 1685-1699 (2011).
3. Katsuno, T., Pradhan, T.K., Ryan, R.R., *et al.* Pharmacology and cell biology of the bombesin receptor subtype 4 (BB4-R). *Biochemistry* **38(22)**, 7307-7320 (1999).
4. Endean, R., Erspamer, V., Falconieri Erspamer, G., *et al.* Parallel bioassay of bombesin and litorin, a bombesin-like peptide from the skin of *Litoria aurea*. *Br. J. Pharmacol.* **55(2)**, 213-219 (1975).

#### 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, 11/22/2022

#### 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