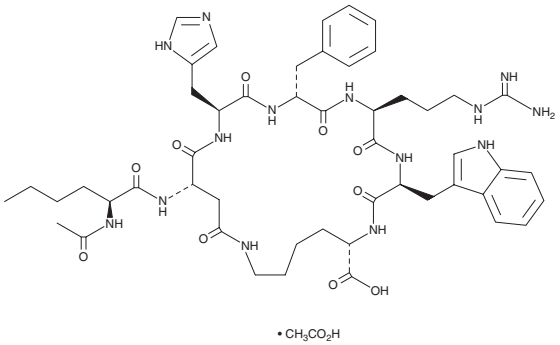
PRODUCT INFORMATION

PT-141 (acetate)

Item No. 35175

CAS Registry No.:	1607799-13-2
Formal Name:	N-acetyl-L-norleucyl-L-α-aspartyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-lysine (2→7)-lactam, monoacetate
Synonym:	Bremelanotide Acetate
MF:	$C_{50}H_{68}N_{14}O_{10} \bullet C_2H_4O_2$
FW:	1,085.2
Purity:	≥98%
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

PT-141 (acetate) is supplied as a solid. A stock solution may be made by dissolving the PT-141 (acetate) in the solvent of choice, which should be purged with an inert gas. PT-141 (acetate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PT-141 (acetate) in these solvents is approximately 10 mg/ml.

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 PT-141 (acetate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of PT-141 (acetate) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PT-141 is a cyclic peptide agonist of melanocortin receptor 4 (MC4R) and an analog of α-melanocyte stimulating hormone (α-MSH; Item No. 29923).[1] It binds to MC3R and MC4R and increases intracellular cAMP levels in HEK293 cells expressing MC4R. It increases dopamine release in the medial preoptic area (mPOA) of the hypothalamus in female rats.[2] PT-141 (100 and 200 µg/kg) increases the number of solicitations, an appetitive sexual behavior, by ovariectomized estrogen- and progesterone-primed female rats. Intranasal administration of PT-141 (50 µg/kg) induces penile erections in male rats.[1] Formulations containing PT-141 have been used in the treatment of hypoactive sexual desire disorder (HSDD) in premenopausal women.

References

1. Molinoff, P.B., Shadiack, A.M., Earle, D., *et al.* PT-141: A melanocortin agonist for the treatment of sexual dysfunction. *Ann. N.Y. Acad. Sci.* **994(1)**, 96-102 (2003).
2. Pfaus, J., Giuliano, F., and Gelez, H. Bremelanotide: An overview of preclinical CNS effects on female sexual function. *J. Sex Med.* **4(Suppl 4)**, 269-279 (2007).

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