PRODUCT INFORMATION



M871 (trifluoroacetate salt)

Item No. 42403

Formal Name:	L-tryptophyl-L-threonyl-L-leucyl-L-asparaginyl-	
	L-seryl-L-alanylglycyl-L-tyrosyl-L-leucyl-L-	
	leucylglycyl-L-prolyl-L-α-glutamyl-L-histidyl-L-	
	prolyl-L-prolyl-L-prolyl-L-alanyl-L-leucyl-L-alanyl-	II The The Law Asia Can Ala Ohi Tim Law Law
	L-leucyl-L-alaninamide, trifluoroacetate salt	H - Irp - Inr - Leu - Asn - Ser - Ala - Giy - Iyr - Leu - Leu -
Peptide Sequence:	WXLNSAGYLLGPEHPPPALALA-NH ₂	Gly—Pro—Glu—His—Pro—Pro—Pro—Ala—Leu—Ala—
	$(X = \xi$ -threonine)	
MF:	C ₁₀₈ H ₁₆₃ N ₂₇ O ₂₈ • XCF ₃ COOH	
FW:	2,287.6	• XCF ₃ COOH
Purity:	≥95%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

M871 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the M871 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. M871 (trifluoroacetate salt) is soluble (≥10 mg/ml) in DMSO and sparingly soluble (1-10 mg/ml) in ethanol.

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 M871 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. M871 (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

M871 is a peptide antagonist of galanin-2 (GAL₂) receptors ($K_i = 13.1 \text{ nM}$).¹ It is selective for GAL₂ receptors over GAL_1 receptors (K_i = 420 nM). M871 (0.1, 1, or 10 nM) inhibits galanin-induced increases in inositol levels in CHO cells expressing human GAL₂ receptors. It increases blood glucose, IL-8, IL-6, IL-22, and Tnf- α levels and decreases skeletal muscle and adipocyte glucose transporter 4 (Glut4) and peroxisome proliferator-activated receptor- γ coactivator- 1α (Pgc- 1α) levels in a rat model of diabetes induced by a highfat diet and streptozotocin (STZ; Item No. 13104) when administered intracerebroventricularly.²

References

- 1. Sollenberg, U., Lundström, L., Bartfai, T., et al. M871–a novel peptide antagonist selectively recognizing the galanin receptor type 2. Int. J. Pept. Res. Ther. 12, 115-119 (2006).
- 2. Fang, P., He, B., Yu, M., et al. Central galanin receptor 2 mediates galanin action to promote systemic glucose metabolism of type 2 diabetic rats. Biochem. Pharmacol. 156, 241-247 (2018).

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

SAFFTY 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

uyer 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.

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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