Adipokinetic hormone (Gryllus bimaculatus)

Cat. No.:	HY-P3568
CAS No.:	113800-65-0
Molecular Formula:	$C_{43}H_{57}N_{11}O_{12}$
Molecular Weight:	919.98
Sequence Shortening:	{Glp}-VNFSTGW-NH2
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

Adipokinetic hormone Gryllus bimaculatus (Grybi-AKH) is an adipokinetic hormone that regulates energy homeostasis in insects by mobilizing lipid and carbohydrate from the fat body. Adipokinetic hormone Gryllus bimaculatus stimulates the locomotor activity of the two-spotted cricket. Adipokinetic hormone Gryllus bimaculatus can also be used in studies to regulate body weight, induce weight loss and alleviate glycogen storage disorders in humans[1][2][3].

In Vivo

Adipokinetic hormone Gryllus bimaculatus (100 pmol/per; topical application; single) stimulates locomotory activity via the increase of haemolymph lipid titres[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	3-day-old adult female Gryllus bimaculatus (Ensifera, Gryllidae)[1].
Dosage:	100 pmol/per
Administration:	Topical application onto the surface of the dorsal thorax under the wings
Result:	Resulted in a rapid increase in haemolymph lipid titres.

REFERENCES

[1]. Lorenz M W, et al. Lipid mobilization and locomotor stimulation in Gryllus bimaculatus by topically applied adipokinetic hormone[J]. Physiological Entomology, 2004, 29(2): 146-151.

[2]. Zhou YJ, et al. Effects of adipokinetic hormone and its related peptide on maintaining hemolymph carbohydrate and lipid levels in the two-spotted cricket, Gryllus bimaculatus. Biosci Biotechnol Biochem. 2018 Feb;82(2):274-284.

[3]. Bernice Z. Schacter, et al. Compositions and methods for promoting lipid mobilization, glycogen mobilization, or both, in humans. Patent WO2003066080A1.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA