



US 20240002435A1

(19) **United States**

(12) **Patent Application Publication**
Li

(10) **Pub. No.: US 2024/0002435 A1**

(43) **Pub. Date: Jan. 4, 2024**

(54) **SYNTHETIC PEPTIDE AND APPLICATION THEREOF**

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(21) Appl. No.: **18/463,811**

(22) Filed: **Sep. 8, 2023**

Related U.S. Application Data

(63) Continuation-in-part of application No. PCT/CN22/80445, filed on Mar. 11, 2022.

(30) **Foreign Application Priority Data**

Mar. 11, 2021 (CN) 202110266149.4

Publication Classification

(51) **Int. Cl.**
C07K 5/083 (2006.01)
A61P 9/10 (2006.01)

(52) **U.S. Cl.**

CPC **C07K 5/0806** (2013.01); **A61P 9/10**
(2018.01)

(57) **ABSTRACT**

The present invention relates to the technical field of medicines. Disclosed are a synthetic peptide and an application thereof. The chemical formula of the synthetic peptide is (Gly)x-(beta-Ala-L-His)y-(Gly)z, (Gly)x-(beta-Ala-L-1-Methyl-His)y-(Gly)z or (Gly)x-(beta-Ala-L-3-Methyl-His)y-(Gly)z; y being equal to or greater than 1, and x and z being 0-3 and being not both equal to zero. A specific peptide can also have beta-Ala-L-His, beta-Ala-L-1-Methyl-His, or beta-Ala-L-3-Methyl-His simultaneously. In the synthetic peptide in the present invention, glycine, carnosine, anserine, ophidine or the like are creatively combined, and the developed mosaic synthetic peptide unexpectedly penetrates the blood-brain barrier to enter the brain by means of intravenous injection and effectively plays a role in treating nervous system diseases. In the present invention, a remarkable treatment effect can be achieved using only 3 mg/kg of synthetic polypeptide intravenous injection dosage.

Specification includes a Sequence Listing.

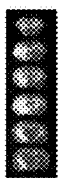
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