

TITLE OF INVENTION: NEW MICROPEPTIDE HMBJ AND USE THEREOF

ABSTRACT

This application discloses new micropeptide HMBJ and use thereof, and relates to the field of biological medicine. The new micropeptide HMBJ is newly discovered human endogenous polypeptide and is coded by human lncRNA ENSG00000272654 and/or an ORF sequence contained therein. The inventor has for the first time discovered that the lncRNA molecule ENSG00000272654 is significantly associated with organ fibrosis, and specifically, expressed at a low level in cells and/or tissues of multiple organ fibroses. In addition, the synthetic peptide prepared based on the sequence of HMBJ exhibits significant inhibitory effect on key indicators of multiple organ fibroses, including collagen type I $\alpha 1$ chain gene, transforming growth factor $\beta 1$, and connective tissue growth factor, indicating that the lncRNA ENSG00000272654, the ORF sequence, and the micropeptide HMBJ translated from the ORF sequence hold significant clinical diagnosis and treatment value for organ fibrosis.

FIG. 11