

Nucleic acid molecules that increase insulin-secreting beta cells

New treatment concept for diabetes mellitus

Overview

It has been reported that reduction or deletion of Langerhans β cells (hereafter β cells) in pancreatic islet occurs not only in type 1 diabetes but also in type 2 diabetes. Therefore, regeneration or promotion of β cells has been proposed as a promising treatment for diabetes. Recently, it has been shown that the transplantation of bone marrow cells promotes the proliferation of β cells. However, the mechanism is not clear.

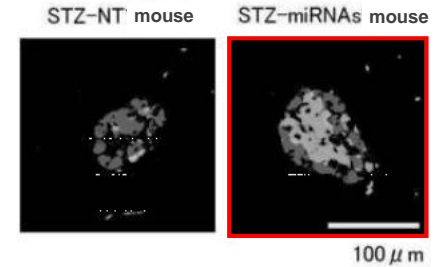
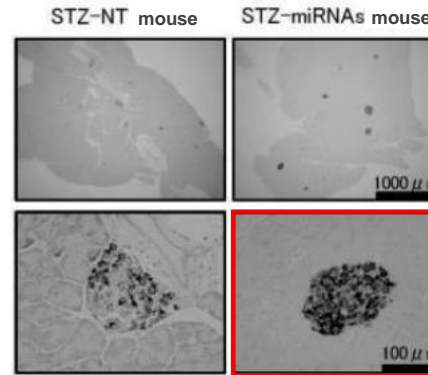
The present invention relates to nucleic acid molecules that promote the proliferation of β cells. Said molecules increased insulin secretion and decreased blood glucose levels in animal model (right figure and related literature) *in vivo*. In combination with drug delivery systems, it is expected to establish a novel treatment for diabetes.

Product Application

- Drugs for Type 1/2 Diabetes
- Research and Analysis of the functions of β cells

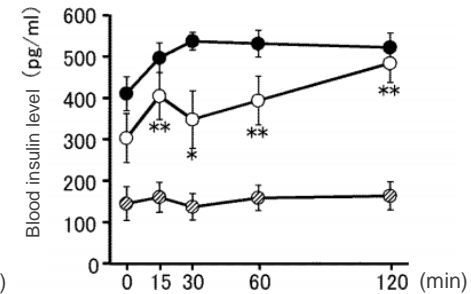
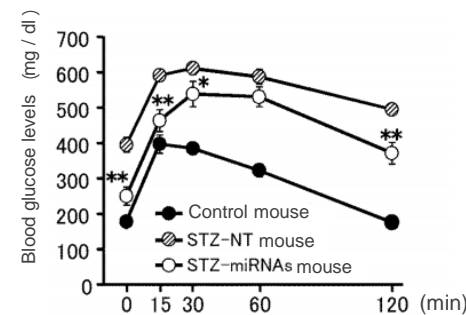
IP Data

IP No. : JP6799861, PatentNo.10881683(U.S.A)
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 Admin No. : T14-170



Insulin-secreting β cells were increased by administration of molecules in this invention.

Decreased blood glucose and increased insulin levels *in vivo*



Related Works

[1] Tsukita S et al. EBioMedicine. 2017 Feb;15:163-172.

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