[Non-patent Document 3] Gerald W. Hart *et al.*, Nature 446: 1017-1022 (2007)
[Non-patent Document 4] Ajit Varki, Nature 446: 1023-1029 (2007)
[Non-patent Document 5] Joseph R. Bishop *et al.*, Nature 446: 1030-1037 (2007)
[Non-patent Document 6] Christopher N. *et al.*, Nature 446: 1038-1045 (2007)
[Non-patent Document 7] Peter H. Seeberger and Daniel B. Werz, Nature 446: 1046-1051 (2007)

Summary

In one aspect, provided herein is use of a pharmaceutical composition in the manufacture of a medicament for treating and preventing tissue fibrogenic disorder comprising siRNA composed of RNA strands consisting of nucleotide sequence of SEQ ID NO: 25 and SEQ ID NO: 26 complementary bound.

Disclosure of the Invention

[Problems to be Solved by the Invention]

The present invention is based on a new finding obtained through studies on sugar chain-related genes. An objective of the present invention is to provide novel uses of sugar chain-related genes. Specifically, the objective is to provide agents that suppress fibrogenesis at the physiological tissue level by inhibiting the function of sugar chain-related genes, and methods of screening for the agents.

[Means for Solving the Problems]

Sugar chains have been suggested to play a very important role *in vivo*. However, little is known about the *in vivo* functions of sugar chains.

As described above, several types of sugars constituting sugar chains are known. Sugars are variously chemically-modified at multiple sites, and such modifications are considered to assume important physiological effects *in vivo*.

As described above, there are various types of sugars that constitute sugar chains, many types of chemical modifications that target sugars, and many chemical modification sites in the sugars. This suggests that possible sugar chain variations are innumerable. Thus, it is very difficult to determine a sugar chain structure that plays a certain role, and it is also extremely difficult to reveal the relationship between a pathological condition caused by a disease and a specific action of a sugar chain.

The present inventors conducted dedicated studies, and as a result succeeded for the first time in discovering that tissue fibrogenesis can be suppressed at the physiological level by inhibiting sulfation at position 4 or 6 of GalNAc, a sugar that constitutes sugar chains.

Furthermore, by studies using various animal disease models, the present inventors demonstrated that inhibitors of sulfation at position 4 or 6 of GalNAc produce therapeutic effects against diseases caused by tissue fibrogenesis (tissue fibrogenic disorders).

The present invention relates to agents that suppress fibrogenesis at the physiological tissue level by inhibiting the functions of sugar chain-related genes, and methods of screening for the agents. Specifically, the present invention provides: