

CLAIMS

~~1. A tissue fibrogenesis suppressing agent, which comprises as an ingredient an inhibitor of sulfation at position 4 or 6 of N-acetylgalactosamine.~~

5 ~~2. The agent of claim 1, which has an effect of suppressing fibrogenesis of a physiological tissue.~~

~~3. The agent of claim 1 or 2, wherein the inhibitor has the activity of inhibiting the function of a sulfotransferase that transfers a sulfate to position 4 or 6 of N-acetylgalactosamine.~~

10 ~~4. The agent of claim 3, wherein the inhibitor is an siRNA that suppresses the expression of the sulfotransferase that transfers a sulfate to position 4 or 6 of N-acetylgalactosamine.~~

15 ~~5. The agent of claim 1 or 2, wherein the inhibitor is a desulfating enzyme that desulfates at position 4 or 6 of N-acetylgalactosamine.~~

~~6. The agent of any one of claims 1 to 5 for treating or preventing a fibrogenic disorder.~~

20 ~~7. A method of screening for a tissue fibrogenesis suppressing agent, which comprises the step of selecting a compound that inhibits sulfation at position 4 or 6 of N-acetylgalactosamine that constitutes a sugar chain.~~

~~8. A method of screening for a tissue fibrogenesis suppressing agent, which comprises the steps of:~~

25 ~~(a) contacting a test compound with N-acetylgalactosamine or a sugar chain comprising N-acetylgalactosamine;~~

~~(b) determining the degree of sulfation at position 4 or 6 of N-acetylgalactosamine; and~~

~~(c) selecting a compound that reduces the degree of sulfation as compared to when the test compound is not contacted.~~

30 ~~9. A method of screening for a tissue fibrogenesis suppressing agent, which comprises the steps of:~~

~~(a) contacting a test compound with a sulfotransferase that transfers a sulfate to position 4 or 6 of N-acetylgalactosamine;~~

35 ~~(b) determining the sulfotransferase activity of the enzyme; and~~

~~(c) selecting a compound that reduces the activity as compared to when the test compound is not contacted.~~

~~10. A method of screening for a tissue fibrogenesis suppressing agent, which comprises the steps of:~~

~~(a) contacting a test compound with a cell expressing a gene encoding a sulfotransferase that transfers a sulfate to position 4 or 6 of N-acetylgalactosamine;~~

~~(b) determining the expression level of the gene in the cell; and~~

~~(c) selecting a compound that reduces the expression level of the gene as compared to when the test compound is not contacted.~~

~~11. A method of screening for a tissue fibrogenesis suppressing agent, which comprises the steps of:~~

~~(a) contacting a test compound with a cell or cell extract containing a DNA wherein a reporter gene is operably linked to the transcriptional regulatory region of the gene encoding a sulfotransferase that transfers a sulfate to position 4 or 6 of N-acetylgalactosamine;~~

~~(b) determining the expression level of the reporter gene; and~~

~~(c) selecting a compound that reduces the expression level of the reporter gene as compared to when the test compound is not contacted.~~

~~12. Use of A method of producing a pharmaceutical composition in the manufacture of a medicament for treating and/or preventing a 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, which comprises the steps of:~~

~~(a) selecting a tissue fibrogenesis suppressing agent from test compounds by the method of any one of claims 7 to 11; and~~

~~(b) combining the agent with a pharmaceutically acceptable carrier.~~

2. The use according to claim 1, wherein the tissue is selected from the group consisting of cardiac tissues, gastrointestinal tissues, lung tissues, pancreatic tissues, ocular tissues, cranial nerve tissues, skin tissues, integumentary tissues, epithelial tissues, connective tissues, supportive tissues and blood tissues.