CLAIMS

1. A pharmaceutical composition for activating migration of pluripotent stem cells, comprising: a compound that activates sphingosine-1-phosphate receptor 2 as an active ingredient thereof, wherein the compound is selected from the group consisting of 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl)-5-(trifluoromethyl)pyridin-2(1H)-one, 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl) pyrrolidine-2,5-dione, 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl)-3-methylimidazolindine-2,4,5-trione, 1-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-((1-methyl- 1H-tetrazol-5-yl)thio)ethanone, and (S)-1-(2-(1-benzyl-2,5- dimethyl-1H-pyrrol-3-yl)-2-oxoethyl-2',3'-dihydrospiro [imidazolidine-4,1'-indene]-2,5-dione.

2. The pharmaceutical composition according to claim 1, wherein the compound that activates sphingosine-1-phosphate receptor 2 is an agonist of sphingosine-1-phosphate receptor 2.

3. The pharmaceutical composition according to claim 2, wherein the agonist of sphingosine-1-phosphate receptor 2 is sphingosine-1-phosphate or a derivative thereof.

~~4. The pharmaceutical composition according to claim 2, wherein the agonist of sphingosine-1-phosphate receptor 2 is selected from the group consisting of 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl)-5-(trifluoromethyl)-pyridin-2(1H)-one, 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl)pyrrolidine-2,5-dione, 1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl)-3-methylimidazolindine-2,4,5-trione, 1-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-((1-methyl-1H-tetrazol-5-yl)thio)ethanone, and (S)-1-(2-(1-benzyl-2,5-dimethyl-1H-pyrrol-3-yl)-2-oxoethyl-2',3'-dihydrospiro[imidazolidine-4,1'-indene]-2,5-dione.~~

~~5.~~4. A ~~The~~ pharmaceutical composition for activating migration of pluripotent stem cells ~~according to claim 1~~, comprising a ~~wherein the~~ compound that activates sphingosine-1-phosphate receptor 2 as an active ingredient thereof, wherein the compound is a sphingosine-1-phosphate lyase inhibitor.

~~6.~~5. The pharmaceutical composition according to claim ~~5~~4, wherein the sphinigosine-1-phosphate lyase inhibitor is selected from the group consisting of (E)-1-(4-((1R,2S,3R)-1,2,3,4-tetrahydroxybutyl)-1H-imidazol-2-yl)ethanone oxime, (1R,2S,3R)-1-(2-isoxazol-3-yl)-1H-imidazol-4-yl)butane-1,2,3,4-tetraol, and 1-(5-((1R,2S,3R)-1,2,3,4-tetrahydroxybutyl)-1H-imidazol-2-yl)ethanone.

~~7.~~6. The pharmaceutical composition according to any of claims 1 to ~~6~~5, wherein activation of migration is guidance to a damaged site in the body.

~~8.~~7. The pharmaceutical composition according to any of claims 1 to ~~7~~6, wherein the pluripotent stem cells are SSEA3-positive.

~~9.~~8. The pharmaceutical composition according to any of claims 1 to ~~8~~7, wherein the pluripotent stem cells are CD105-positive.

~~10.~~9. The pharmaceutical composition according to any of claims 1 to ~~9~~8, wherein the pluripotent stem cells are CD117-negative and CD146-negative.

~~11.~~10. The pharmaceutical composition according to any of claims 1 to ~~10~~9, wherein the pluripotent stem cells are CD117-negative, CD146-negative, NG2-negative, CD34-negative, vWF-negative and CD271-negative.

~~12.~~11. The pharmaceutical composition according to any of claims 1 to ~~11~~10, wherein the pluripotent stem cells are CD34-negative, CD117-negative, CD146-negative, CD271-negative, NG2-negative, vWF-negative, Sox10-negative, Snail-negative, Slug-negative, Tyrp1-negative and Dct-negative.

~~13.~~12. The pharmaceutical composition according to any of claims 1 to ~~12~~11, wherein the pluripotent stem cells are pluripotent stem cells having all of the following properties:

(i) low or absent telomerase activity;

(ii) ability to differentiate into cells of any of the three germ layers;

(iii) absence of demonstration of neoplastic proliferation; and,

(iv) presence of self-renewal ability.