Claims

1. A method for producing a soy milk fermentation product, comprising:

an enzyme treatment step of hydrolyzing soy milk with a peptide bond hydrolase to obtain a fermentation substrate, and

a fermentation step of fermenting the fermentation substrate with lactic acid bacteria belonging to *Lactobacillus brevis* to obtain a fermentation product,

wherein the free amino acid content in the fermentation substrate is no less than 1000 ppm by mass and no greater than 6000 ppm by mass, based on the total mass.

2. The method according to claim 1, further comprising an enzyme inactivation step of inactivating the peptide bond hydrolase in the fermentation substrate.

3. The method according to claim 1 or 2, wherein the peptide bond hydrolase is one or more types of enzyme selected from the group consisting of peptidases and proteases.

4. The method according to any one of claims 1 to 3, wherein the peptide bond hydrolase includes an exopeptidase or an exoprotease.

5. The method according to any one of claims 1 to 4, wherein the lactic acid bacteria is *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632).

~~6. A soy milk fermentation product obtained by the method according to any one of claims 1 to 5.~~

~~7. A food or beverage comprising a soy milk fermentation product obtained by the method according to any one of claims 1 to 5.~~

~~8~~6. A method for producing a soy milk fermented beverage, comprising:

an enzyme treatment step of hydrolyzing soy milk with a peptide bond hydrolase to obtain a fermentation substrate,

an enzyme inactivation step of inactivating the peptide bond hydrolase in the fermentation substrate,

a fermentation step of fermenting the fermentation substrate with lactic acid bacteria belonging to *Lactobacillus brevis* to obtain a fermentation product, and

an addition step of adding a protein coagulation inhibitor to the fermentation product.

~~9~~7. The method according to claim ~~8~~6, wherein the protein coagulation inhibitor is at least one type selected from among soybean polysaccharides, pectin, carboxymethyl cellulose and sodium alginate.

~~10~~8. The method according to claim ~~8~~6 or ~~9~~7, wherein the protein coagulation inhibitor is a mixture of soybean polysaccharides and pectin.

~~11~~9. The method according to any one of claims ~~8~~6 to ~~10~~8, further comprising, after the enzyme treatment step, a homogenization step of homogenizing the treatment product at least once.

~~12~~10. The method according to claim ~~11~~9, wherein the homogenization step is carried out at least once after the fermentation step.

~~13~~11. The method according to any one of claims ~~8~~6 to ~~12~~10, wherein the lactic acid bacteria are one or more strains selected from among *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632), *Lactobacillus brevis* SBC8027 (deposit number: FERM BP-10630),

Lactobacillus brevis SBC8044 (deposit number: FERM BP-10631), *Lactobacillus brevis* JCM1061, *Lactobacillus brevis* JCM1065 and *Lactobacillus brevis* JCM1170.

~~14. A soy milk fermented beverage obtained by the method according to any one of claims 8 to 13.~~

Claims

1. A method for producing a soy milk fermentation product, comprising:

an enzyme treatment step of hydrolyzing soy milk with a peptide bond hydrolase to obtain a fermentation substrate, and

a fermentation step of fermenting the fermentation substrate with lactic acid bacteria belonging to *Lactobacillus brevis* to obtain a fermentation product,

wherein the free amino acid content in the fermentation substrate is no less than 1000 ppm by mass and no greater than 6000 ppm by mass, based on the total mass.

2. The method according to claim 1, further comprising an enzyme inactivation step of inactivating the peptide bond hydrolase in the fermentation substrate.

3. The method according to claim 1 or 2, wherein the peptide bond hydrolase is one or more types of enzyme selected from the group consisting of peptidases and proteases.

4. The method according to any one of claims 1 to 3, wherein the peptide bond hydrolase includes an exopeptidase or an exoprotease.

5. The method according to any one of claims 1 to 4, wherein the lactic acid bacteria is *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632).

6. A method for producing a soy milk fermented beverage, comprising:

an enzyme treatment step of hydrolyzing soy milk with a peptide bond hydrolase to obtain a fermentation substrate,

an enzyme inactivation step of inactivating the peptide bond hydrolase in the fermentation substrate,

a fermentation step of fermenting the fermentation substrate with lactic acid bacteria belonging to *Lactobacillus brevis* to obtain a fermentation product, and

an addition step of adding a protein coagulation inhibitor to the fermentation product.

7. The method according to claim 6, wherein the protein coagulation inhibitor is at least one type selected from among soybean polysaccharides, pectin, carboxymethyl cellulose and sodium alginate.

8. The method according to claim 6 or 7, wherein the protein coagulation inhibitor is a mixture of soybean polysaccharides and pectin.

9. The method according to any one of claims 6 to 8, further comprising, after the enzyme treatment step, a homogenization step of homogenizing the treatment product at least once.

10. The method according to claim 9, wherein the homogenization step is carried out at least once after the fermentation step.

11. The method according to any one of claims 6 to 10, wherein the lactic acid bacteria are one or more strains selected from among *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632), *Lactobacillus brevis* SBC8027 (deposit number: FERM BP-10630), *Lactobacillus brevis* SBC8044 (deposit number: FERM BP-10631), *Lactobacillus brevis* JCM1061, *Lactobacillus brevis* JCM1065 and *Lactobacillus brevis* JCM1170.