CLAIMS

[Claim 1]

An agent for improving cartilage functions, comprising at least one effective ingredient selected from the group consisting of lactoperoxidase, cystatin, HMG-like protein, and decomposed products thereof, wherein the agent is used for preventing and/or treating an initial degeneration and/or an initial calcification of an articular cartilage layer.

[Claim 2]

The agent for improving cartilage functions according to claim 1, wherein the lactoperoxidase, the cystatin, and the HMG-like protein are derived from mammal milk.

[Claim 3]

The agent for improving cartilage functions according to claim 1 or 2, wherein the lactoperoxidase, the cystatin, and the HMG-like protein are derived from bovine milk.

[Claim 4]

The agent for improving cartilage functions according to any one of claims 1 to 3, wherein the decomposed products of the lactoperoxidase, the cystatin, and the HMG-like protein are prepared through decomposition of the lactoperoxidase, the cystatin, and the HMG-like protein with a protease.

Claim 5]

The agent for improving cartilage functions according to claim 4, wherein the protease is at least one protease selected from the group consisting of pepsin, trypsin, chymotrypsin, pancreatin, and papain.

[Claim 6]

A drink or food product for improving cartilage functions comprising the agent for improving cartilage functions according to any one of claims 1 to 5, a nutritive composition for improving cartilage functions comprising the agent for improving cartilage functions according to any one of claims 1 to 5, or a livestock food for improving cartilage functions comprising the agent for improving cartilage functions according to any one of claims 1 to 5, wherein the drink or food produce, the nutritive composition or the livestock food is use for preventing and/or treating an initial degeneration and/or an initial calcification of an articular cartilage layer.