Introducing a **NEW ERA** of treatment to stop the early stages of osteoarthritis & a **NEW POTENTIAL** of exogenous cartilage proteoglycan as a new material for cartilage regeneration.



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Each 300mg Vegetable Capsule:

Fish Proteoglycan Extract (Providing 9.5mg Proteoglycan)

25mg

Boswellia Serrata Gum Extract

100mg

Sodium Hyaluronate (Providing 30mg Hyaluronic Acid)

35.45mg

1000 IU

Vitamin C (Ascorbic Acid)

100mg

*ApresFlex™ is the trademark of Boswellia Serrata Gum Extract

Indication: Used as health supplement.

Dosage: Adults: Take 1 capsule daily before meal.

Source Of Capsule: Vegetable

Storage: Store below 30°C. Protect from light & moisture.

Keep out of reach of children. Jauhkan daripada kanak-kanak. Derived from seafood

Please consult your doctor/ pharmacist before using this product if you are on other medicines.

For any enquiry, please contact:

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What is Proteoglycan?

Proteoglycan is a kind of glycoprotein in a broad sense that sulfated polysaccharide called glycosaminoglycan such as chondroitin sulfate, dermatan sulfate, heparan sulfate, heparin and keratan sulfate covalently bonded to the protein. Proteoglycan is present in the extracellular matrix and cell surfaces of human. It is also present in the fibrous matrix and the cell surface of hyaluronic acid and collagen, and forming a fibrous matrix proteins and complex of hyaluronic and collagen. Proteoglycan is not easily decomposed by the stomach acid. Therefore, it passed through the stomach maintaining its high molecular state. Nevertheless, due to the decomposing enzymes in the small intestine, it is broken down up to a certain size. This decomposition product becomes the immunizing antigen M cells (micro-fold cells) as it passes through and which has been thought to bind with the immune cells. Finally, it is considered to be enzymatically decomposed in the liver. The balance that was not decomposed will be excreted in the urine.

Proteoglycan is Extracted from Nasal Cartilage of Salmon

Salmon is very popular and eaten widely in the world. Proteoglycan are extracted from the nasal cartilage of natural salmon, Nasal cartilage of salmon called "Hizu" (loy head), because of its clear and beautiful looks, it is eaten traditionally in Hokkaido and Tohoku region. The ingredient is extracted from natural salmon of Hokkaido Japan. From the catching to processing, all the process is done in Japan, so it has a strong traceability.

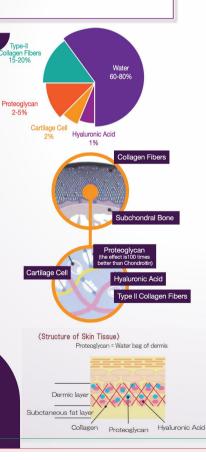
Proteoglycan is Different from Collagen



Articular cartilage is the bluish gel-like tissue that covers the ends of bones. It is 4-6mm thick, softer than bone, and could be found on many joint surfaces. The type II collagen is the basis for articular cartilage, and its fibrillar network allows cartilage to entrap the proteoglycan aggregate. The synovial fluid, which is also a part of the articular cartilage, contains hyaluronic acid as its main component, lubricates the articulating joints. The articular cartilage makes joints easier to move, and allows the bones to glide over each other very little friction.

Between the cells there is a jelly like substance which is called extracellular matrix. Common ingredients that compose this extracellular matrix are hyaluronic acid and collagen, but it has revealed that proteoglycan is the most important ingredient between them.

Not only high moisture retention, it brings about promotion of cell regeneration (same effect as EGF) by generating additional collagen and hyaluronic acid.



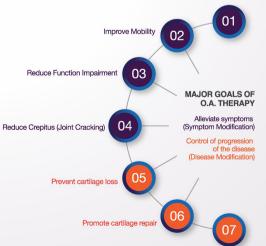
PROJOINCE MECHANISM OF ACTION BLOCK ARTICULAR DEGRATION BY:

- Potential of exogenous cartilage proteoglycan as a new material for cartilage regeneration of
- The role of aggrecan in normal & osteoarthritic cartilage
- Proteoglycan supporting the growth and cell, development of cells through their signaling and structural properties
- Usefulness of the supplement containing proteoglycan for Japanese Health People Feeling knees discomfort
- High purity of nasal salmon proteoglycan
- With added Sodium hyaluronate (Hyaluronic Acid), and essential component of the synovial fluid, which enables the fluid to act as a lubricant, a shock absorber and a filter that control the movement of cells and large molecules with the joint.* (No. 10).
- No side effect & risk free
- Long-term efficacy & safety
- Approved by NPRA (MAL21056047NC)

*Source: Microbial fermentation, resulting in Hyaluronic Acid free of BSE & allergens, Non-GMO and vegetarian



Relieve Pain & Inflammation



Proteoglycan are important components of the ECM (extracellular matrix). Proteoglycan is supporting the growth and development of cells through their signalling and structural properties. 3

JACTA (Japan Clinical Trial Association) conducted a randomized, placebo-controlled, double-blind study to verify the joint support effects of the supplement containing 10mg proteoglycan for 12weeks on 36 subjects. The study showed significant improvement of the knee condition in the scores of VAS (Visual Analogue Scale) and on the questionnaire of modified J-KOOS (Japanese Knee Injury and Osteoarthritis Outcome Score).

The studies shown that proteoglycan has its own growth-stimulating effect in maintaining good cartilage cells. Proteoglycan improves the condition of joint by regeneration and protection against scuffing of cartilage. Proteoglycan achieves a suppression of inflammation & relieves pain too.

Stimulatory effects of chondrocyte proliferation