



Bioiberica
Taking life science further
Healthcare

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Taking life science further



Bioiberica is a global Life Science company committed to improving people, animal, and plant health and well-being. **Our core business is the identification, extraction and development of animal-derived biomolecules**, which are transformed into high quality products for the pharmaceutical, nutraceutical, veterinary, feed and agricultural industries. This specialisation has positioned us as the **leading Heparin API manufacturer** and a **world reference** in the research, production and sale of other animal-derived APIs, ingredients and compounds, such as **chondroitin sulfate, glucosamine, hyaluronic acid, native type II collagen or thyroid**.

EXPERTS IN ANIMAL-DERIVED APIS

Chondroitin sulfate

FOR THE SYMPTOMATIC TREATMENT OF OSTEOARTHRITIS AND JOINT DISCOMFORT.

Chondroitin sulfate is an important structural component of the cartilage and other connective tissues in the body, such as tendons, ligaments, skin, and also blood vessels.

The access to the highest quality raw materials, together with our processing method, **guarantee chondroitin sulfate 100% assay every time**, minimizing the presence of impurities and satisfying the quality requirements of the most important Pharmacopoeias worldwide.

BIOIBERICA'S CHONDROITIN SULFATE IS THE CHEMICAL REFERENCE SUBSTANCE IN THE EUROPEAN AND THE UNITED STATES PHARMACOPOEIAS

SOURCES:

- Bovine
- Porcine

QUALITIES:

- European Pharmacopoeia
- US Pharmacopoeia
- Russian Pharmacopoeia
- Japanese Pharmacopoeia
- Korean Pharmacopoeia

PURITIES:

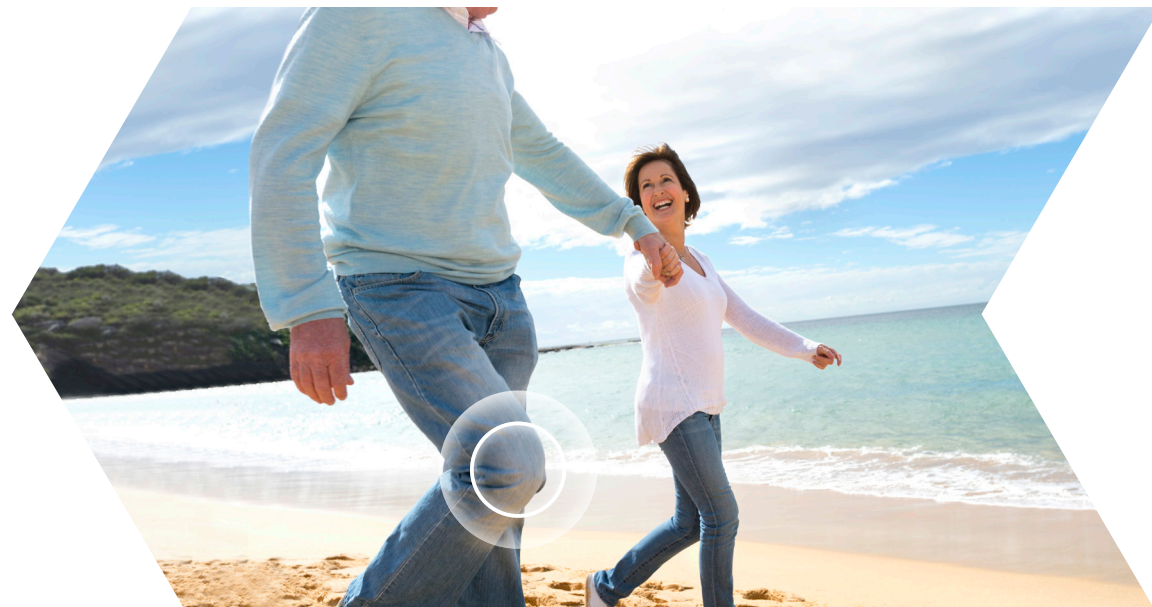
- 90-100%

USES:

- Pharmaceuticals
- Injectable products
- Nutraceuticals
- Cosmetic/topical products

DMFs/CERTIFICATES:

- DMF for all qualities on demand
- Europe: CEP (double), TSE
- Japan: Accreditation certificate of foreign drug manufacturer
- Korea: KFDA Registered
- GMP certificate



Glucosamine

FOR THE SYMPTOMATIC TREATMENT OF OSTEOARTHRITIS AND JOINT DISCOMFORT.

Glucosamine is a molecule that forms part of certain glycosaminoglycans, such as hyaluronic acid, which in turn is a component itself of the extracellular matrix of most connective tissues.

Glucosamine is obtained from the highest quality raw material and follows strict quality and traceability controls, ensuring the **maximum purity and guaranteeing final product safety and efficacy**.

BIOIBERICA'S GLUCOSAMINE IS PRODUCED BY HYDROLYSIS OF CRUSTACEAN SHELLS AND IS AVAILABLE FOR SALE IN THE FORM OF ANY OF ITS SALTS.

SOURCES:

- Exoskeletons of crustaceans

USES:

- Pharmaceuticals
- Nutraceuticals

DMFs/CERTIFICATES:

- DMF for all qualities
- Halal Certificate
- GMP Certificate

QUALITIES:

- European Pharmacopoeia
- US Pharmacopoeia
- Russian Pharmacopoeia

SALTS:

- Glucosamine Hydrochloride
- Glucosamine Sulfate Sodium Chloride
- Glucosamine Sulfate Potassium Chloride



Thyroid

FOR THE TREATMENT OF HYPOTHYROIDISM

Thyroid is a natural active pharmaceutical ingredient extracted from porcine thyroid glands and it is used to treat hypothyroidism, a disease causing a low volume of thyroidal hormones.

Thyroid contains two different hormones, tetraiodothyronine (thyroxine, T4) and triiodothyronine (liothyronine, T3). It is meant to replace or supplement the hormones that are usually made by human thyroid gland.

BIOIBERICA'S THYROID IS ENTIRELY OF EUROPEAN ANIMAL ORIGIN

SOURCES:

- Porcine

QUALITIES:

- 3 USP
- 1 USP

USES:

- Pharmaceuticals
- Compounding pharmacies

DMFs/CERTIFICATES:

- GMP certificate



INGREDIENTS FOR MOBILITY: A BUSINESS OPPORTUNITY



Native type II collagen

Innovating ingredient supplying native type II collagen extracted from chicken sternums. It acts through an immune-mediated mechanism of action called oral tolerance¹.

USE:

· Cartilage²

DOSE:

· 40 mg/day³

REGULATORY STATUS:

New Dietary Ingredient (USA) exempt from notification, Food Supplement Ingredient (EU).



More than hyaluronic acid

Patented natural ingredient extracted for rooster combs with a high concentration of hyaluronic acid and other components (collagen and polysaccharides) that act in synergy to enhance its effect.

USE:

· Synovial Fluid⁴
· Muscle⁵

DOSE:

· 80 mg/day⁶

REGULATORY STATUS:

GRAS (US), Novel Food (EU), NHP MF – PLA (Canada), Non-traditional not novel food (Australia).

Synovial Fluid

Muscle

Cartilage

Tendon

Subchondral Bone

tendoactive®

Specific formulation for tendon health

Proprietary formula based on hydrolyzed collagen type I and mucopolysaccharides (MPS) that nourishes the tendon, helping to maintain its biomechanical properties.

USE:

· Tendon⁷

DOSE:

· 520 mg/day (hydrolyzed collagen type I + MPS) + 60 mg/day Vit C⁸

REGULATORY STATUS:

Dietary/Food Supplement Ingredient (USA & EU)
/ NHP MF – PLA (Canada)



The most researched brand of Chondroitin Sulfate

The most researched chondroitin sulfate of Bioiberica on the market with the highest quality.

USE⁹:

· Cartilage
· Synovial Fluid
· Subchondral bone

DOSE:

· 800 – 1.200 mg/day¹⁰

REGULATORY STATUS:

Dietary/Food supplement ingredient

1- Park KS, et al. Mod Rheumatol. 2009;19(6):581-9. 2- Mannelli et al. Osteoporos Int (2015) 26(Suppl 1): 71.P366 3- Bakilan F, et al. Eurasian J Med. 2016 Jun;48(2):95-101. 4- Torrent A, et al. Osteoarthritis Cartilage. 2009;17(1):S277-278. - Torrent A, et al. Osteoarthritis Cartilage. 2009;17(1):S278-279 - Torrent A, et al. Osteoarthritis Cartilage. 2010;18(2):S246-247. - Castillo V, et al. Osteoarthritis Cartilage. 2010;18(2):S244-S245. - Carmona JU, et al. Vet Comp Orthop Traumatol. 2009;22(6):455-9. 5- Torrent et al. The FASEB Journal. 2015;Vol. 29 no. 1 Supplement 737.4. 6- Sánchez J et al. Genes Nutr. 2014 Sep;9(5):417. - Martínez-Puig, et al. Mediterr J Nutr Metab. 2013;6:63-68 - Sola et al. Food Funct. 2015 Aug 24. Nov;6(11):3531-9.

7- Shakibaei M, et al. Histology and Histopathology 2011; 26(9): 1173-85. 8- Balias R, et al. Curr Ther Res Clin Exp. 2016 Nov 18;78:1-7. - Nadal F, et al. Osteoarthritis Cartilage. 2009; 17 (S1): S253. - Arquer A, et al. Apunts Med Esport. 2014;49:31-6. 9- du Souich P. 2014 Jun;142(3):362-74. 10- Pelletier JP, et al. Arthritis Res Ther. 2016 Nov 3;18(1):256. - Pavelka K, et al. Litera Rheumatologica 1998, 24:21-30. - Möller J, et al. Osteoarthritis Cartilage. 2010 Jun;18 Suppl 1:S32-40.

PIPELINE

Bioiberica's New Developments

At Bioiberica we want **to be world leaders in the identification, extraction and development of biomolecules of animal origin**, which are transformed into high quality products for the pharmaceutical and nutraceutical industries.

In our R&D pipeline:

Our pipeline's potential remains strong, with new ingredients in development to cover different market needs. Currently, Bioiberica is developing new products from animal origin in the R&D pipeline such as Trypsin and Diamine oxidase (DAO) enzymes and Polysulfated glycosaminoglycan (PSGAG).

TRYPSIN:

Pancreatic enzymes for Infant Formula and Pharma applications.

DIAMINE OXIDASE (DAO):

Histamine neutralizing enzyme ingredient.

POLYSULFATED GLYCOSAMINOGLYCAN (PSGAG):

Veterinary API for the intramuscular treatment of arthritis and degenerative joint disease



Bioiberica is looking for partners to develop new products from animal origin

Our **goal** is to efficiently and creatively connect resources and expertise with alternative and integrated development models.

We **focus** our efforts to build a sustainable pipeline, the reason why Bioiberica is actively looking for partners to develop new products.

Why Bioiberica?

Specialists in **Glycosaminoglycans** and other biological substances of non-recombinant origin.

Specialists in **extractive chemistry** and the derivation of biomolecules.

Control of the entire **supply chain** and assurance of the **traceability** and quality of our products.

Development of analytical methods for the characterisation of **complex molecules**.

Optimisation and **validation** of processes and products.

Team formed of graduates and doctors of different disciplines in the **Life Sciences** sector.

Regulatory support.

Laboratory, pilot plant and **industrial scale plant**.

Development in accordance with **GMP, GLP** and **GCP** guidelines.

Tailored products.





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