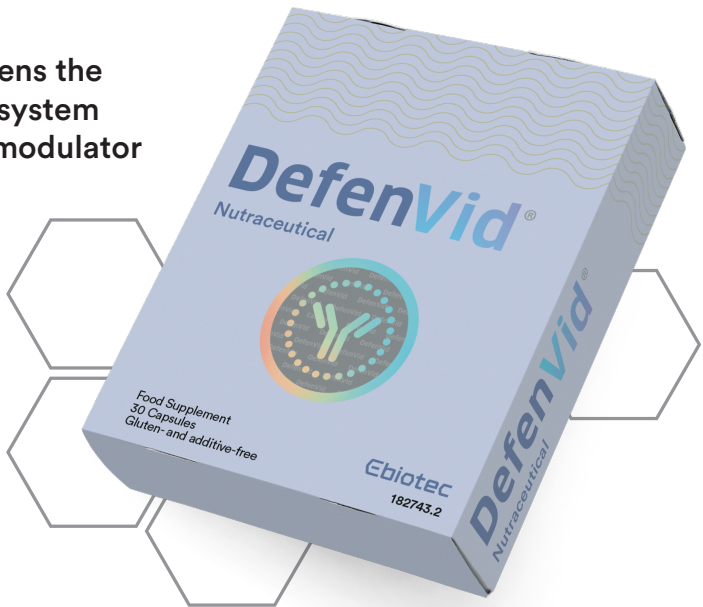


Strengthens the  
immune system  
Immunomodulator



## What is DefenVid?

**DefenVid®** is a nutritional supplement with 100% natural ingredients obtained from the marine species *Trachurus trachurus* (Atlantic horse mackerel, of the *Carangidae* family), by non-denaturing biotechnological processes that enable the preservation of all the healthy properties of the original species.

## Composition

E-JUR-94013® extract. Marine proteins of high biological value. Essential amino acids needed for protein synthesis and defense mechanisms. Natural mono- and polyunsaturated fatty acids, mainly of the omega 3 type. Vitamins, essentially B<sub>12</sub>, B<sub>6</sub>, D and A. Minerals, essentially iodine, iron, and magnesium.

Reference Analysis per 100 g

PROTEINS: 65 - 80%		LIPIDS: 15 - 25%			
Amino acids %		Saturated (% in Lipids)		MINERALS	
GLUTAMIC ACID	10.0	PALMITIC	18.6	CALCIUM	1315.4 mg
ASPARTIC ACID	7.5	MYRISTIC	9.2	POTASSIUM	1194.2 mg
LEUCINE	5.9	STEARIC	4.1	PHOSPHORUS	1033.5 mg
LYSINE	5.6	Monounsaturated (% in Lipids)		SODIUM	358.5 mg
PROLINE	4.8	OLEIC	12.5	MAGNESIUM	106.8 mg
VALINE	4.4	PALMITOLEIC	4.6	ZINC	5.7 mg
ARGININE	4.3	NERVONIC	2.4	IRON	5.5 mg
PHENYLALANINE	4.3	Polyunsaturated (% in Lipids)		COPPER	470 mcg
ALANINE	4.2	EICOSATRIENOIC	19.9	VITAMINS	
GLYCINE	4.2	LINOLENIC	8.4	VITAMIN C	26 mg
ISOLEUCINE	3.8	DHA	2.5	PANTOTHENIC ACID	3.3 mg
SERINE	3.4	EPA	1.8	INOSITOL	29 mcg
TYROSINE	3.0	ARACHIDONIC	1.1	VITAMIN D	13.5 mcg
HISTIDINE	2.6	LINOLEIC	0.7	CARBOHYDRATES 0 - 3 %	
THREONINE	2.3				
METHIONINE	2.2				
CYSTEINE	1.1				
TRYPTOPHAN	1.0				

Note: For health professionals only

The information contained in this data sheet is directed to health professionals.

## Data Sheet

**BRAND NAME**  
DefenVid®

**MANUFACTURER**  
EuroEspes Biotechnology S.A.  
(EBIOTEC).

**NATIONAL CODE (SPAIN)**  
182743.2

**ORIGIN**  
*Trachurus trachurus* (Atlantic horse mackerel, of the *Carangidae* family).

**PRODUCT**  
E-JUR-94013®

**STUDIES**  
Supported by basic and clinical scientific studies.

**COMMERCIAL PRESENTATION**  
Box of 30 capsules,  
containing 3 blisters and one leaflet.

Box of 90 capsules,  
containing 9 blisters and one leaflet.

**RECOMMENDED DOSE**  
3 capsules/day during meals.  
Recommended treatment for a  
minimum of 3 months.

**COMPOSITION**  
250 mg of E-JUR-94013®,  
100% extract of *Trachurus trachurus*,  
in hard gelatin capsules.

NUTRITIONAL ANALYSIS (per 3 capsules)	
ENERGY VALUE	14.70 kJ 3.60 kcal
TOTAL FATS	150 mg
OF WHICH SATURATES	48 mg
TOTAL CARBOHYDRATES	12 mg
OF WHICH SUGARS	0.75 mg
PROTEIN	525 mg
SALT	6.6 mg
E-JUR-94013®	750 mg

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## Indications

**Main benefits:** DefenVid® has an immunomodulatory effect with a rapid response in the recovery of the immune system. DefenVid® is a highly beneficial nutraceutical in the diet of those persons who wish to boost their immune system, contributing to enhancing the body's defenses in periods of colds and flu, in states of convalescence and fatigue, and it provides a reinforcement of the organism in periods of physical and mental stress. DefenVid® has demonstrated an immunomodulatory effect in *in vitro* studies, as well as in animals and humans.

**Other benefits:** DefenVid® has anti-inflammatory properties. DefenVid® decreases the levels of IgE, a protein that is usually high in allergic processes.

## Nutritional properties

1. E-JUR-94013® extract is the structural base of DefenVid®. It contains all the biological properties of the original species.
2. Lyophilization is the core technology used in the manufacture of DefenVid®. This technology allows the extraction and concentration of nutrients and active molecules in a pharmaceutical form. The application of this technique enables all the healthy properties of the original raw material to remain unchanged.
3. DefenVid® contains essential fatty acids: omega 3 (alpha-linolenic, EPA and DHA), omega 6 (linoleic and DPA), and omega 9 (oleic acid). The omega 3 and 6 fatty acids accomplish fundamental physiological functions in the organism, and have important health properties, the most notable being cardioprotection.
4. DefenVid® contains proteins with a high nutritional value due to its content in essential amino acids. Proteins are fundamental structural and functional elements within each cell of the body and are involved in a wide range of physiological functions. All cells, tissues and organs contain proteins that are essential for their growth and repair, and therefore for the maintenance of good health.
5. DefenVid® contains vitamins, mainly A, B, D, B<sub>12</sub> y B<sub>6</sub>. Minerals, such as iron, potassium, magnesium, and iodine.

## Precautions

DefenVid® contains a purified extract of blue fish. Not suitable for persons allergic to any of its ingredients. Not suitable for people with phenylketonuria. Do not exceed the recommended daily dose. Keep out of the reach of children. Should not be used as a substitute for a balanced diet.

Does not contain gluten or additives.

## WHAT IS A NUTRACEUTICAL?

Nutraceuticals are products derived from natural sources whose nutritional and functional characteristics provide benefits to help improve health and therefore reduce the risk of suffering diseases; they may be combined with other active ingredients or exogenous nutrients such as vitamins, minerals, antioxidants, fatty acids, etc.; however, this type of products, which cover a wide range of possibilities, should be taken as part of a healthy, balanced diet and never as a replacement for it.

General Health Register  
Nº: 26.06671/C



Customer hotline:  
+34 981 784 848 / +34 981 780 505

### MANUFACTURED BY:

EuroEspes Biotechnology (EBIOTEC)  
Pol. Ind. de Bergondo  
Parroquia de Guisamo, Parc. A6 - Nave F  
15165 Bergondo. Corunna (Spain)

[www.ebiotec.com](http://www.ebiotec.com) | [info@ebiotec.com](mailto:info@ebiotec.com)

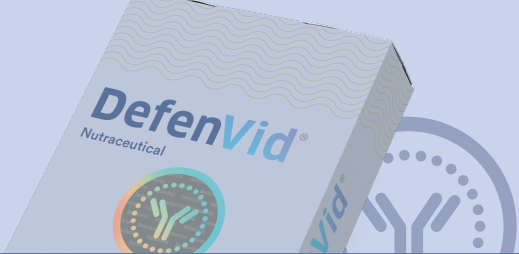
**Ebiotec**  
EuroEspes Group

ISO 9001 CERTIFIED COMPANY

### OUR OWN MANUFACTURING PROCESSES:

DefenVid® is a nutritional supplement belonging to the marine line of nutraceuticals developed and manufactured by EuroEspes Biotechnology S.A. (Ebiotec).

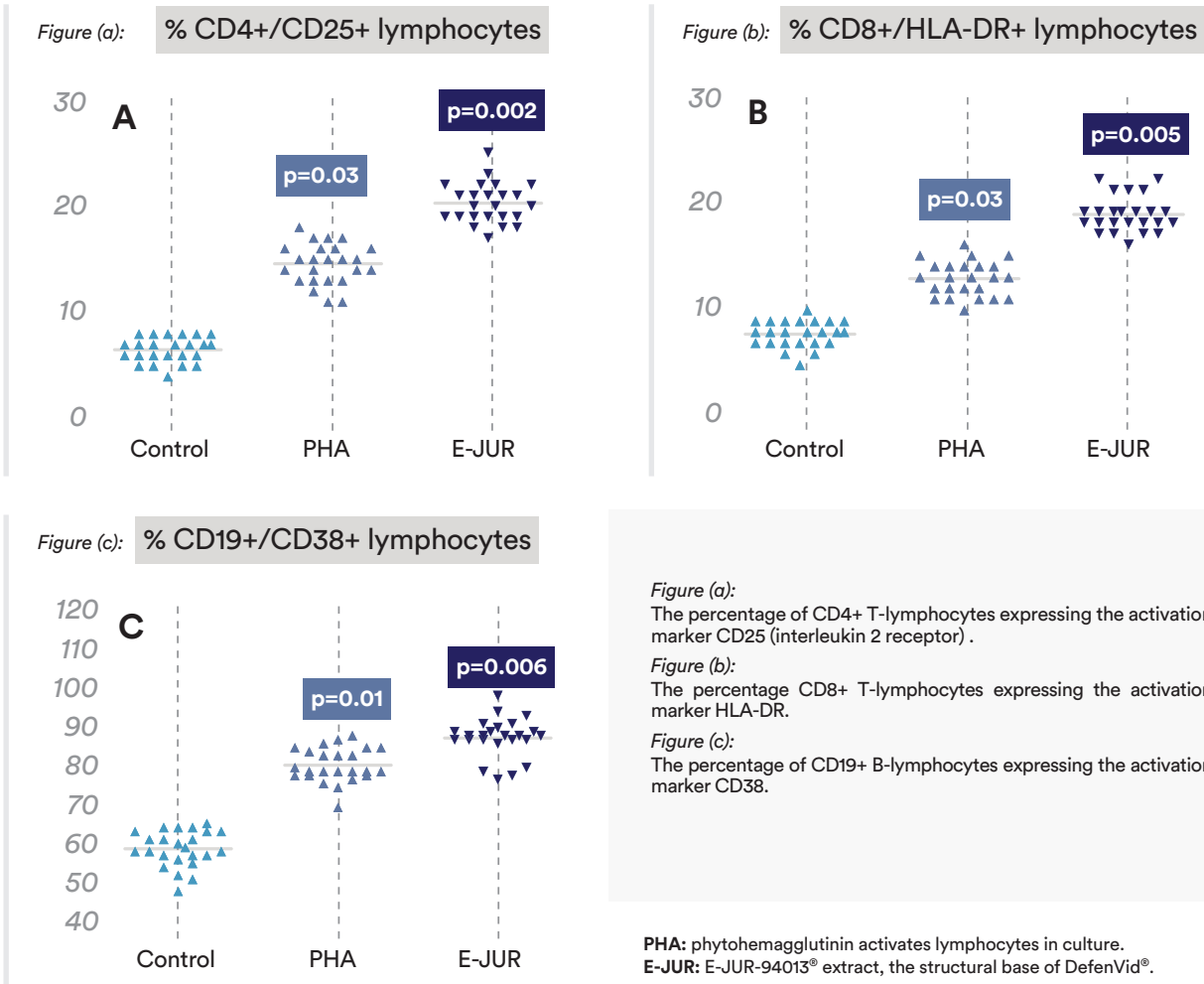
The nutraceutical bioproducts manufactured by EuroEspes Biotechnology are not limited to a particular nutrient (e.g. omega 3) or to a set of minerals and vitamins, or a specific protein complex, but because of their structure they contain a set of healthy substances that will help in many aspects of life for the maintenance of good health. Origin: A single species. The raw material comes from sustainable fishing, which is not the case of some omega 3 that comes from endangered species or species that maintain the balance of the trophic chain of oceans and seas. Our products are 100% natural and in the manufacturing process no synthetic chemical industrial processes are used (free of additives, etc).



01. DefenVid® can activates human lymphocytes *in vitro*, hence encouraging cellular immunity.

Twenty-four blood samples from healthy volunteers were collected and peripheral blood lymphocytes were cultivated for a period of 2 days with DefenVid®. The state of activation, FAS expression and apoptosis of peripheral blood lymphocytes were measured via flow cytometry.

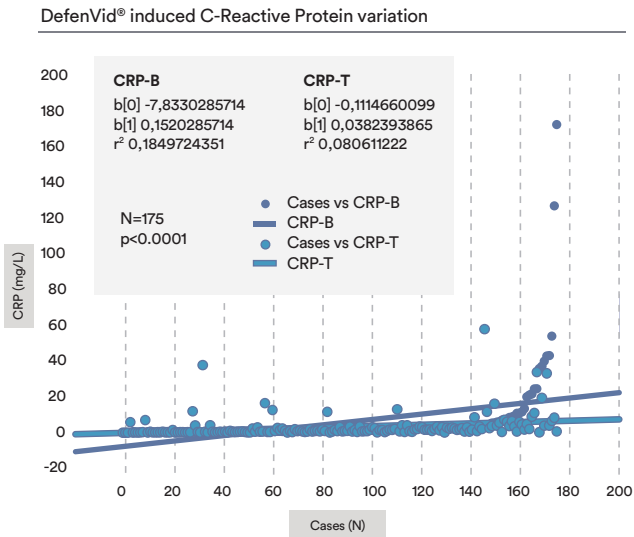
DefenVid® is able to activate human immune cells *in vitro*, increasing the levels of CD4+ (T-helper), CD8+ (T-cytotoxic), and CD19+ (B cells) lymphocytes. B lymphocytes make antibodies and T-lymphocytes protect the body from infection and may help fight cancer.



02. DefenVid® supplementation affects C- Reactive Protein (CRP ) levels in blood.

The levels of CRP-US were studied in 175 subjects supplemented with DefenVid® (750 mg/day for 3 months). A regulatory effect on the levels of CRP was observed in these subjects, with a marked decrease in the high values of CRP, reflecting a possible antiinflammatory effect.

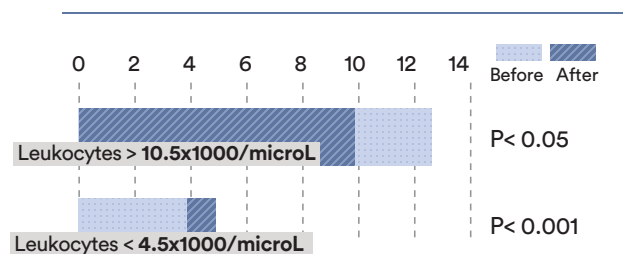
CRP is a biomarker of inflammation; the level of CRP rises when there is inflammation throughout the body. It is one of a group of proteins called acute phase reactants that go up in response to inflammation. The levels of acute phase reactants increase in response to certain inflammatory proteins, as cytokines. These proteins are produced by white blood cells during inflammation.



### 03. Immunomodulatory effects of DefenVid® supplementation on patients with irregular white blood cell count.

Two hundred and five patients (mean age  $68.41 \pm 9.11$  years) with different types of white blood cell alteration, were supplemented 750 mg per day (3 capsules) of DefenVid® to be taken with main meals, for three months. Patients had not undergone any treatment for their condition and were grouped according to blood leukocyte cell count (total or subclasses), high or low relative to reference ranges. Their total white blood cell count (leukocytes), neutrophils, lymphocytes, monocytes, eosinophils and basophils were recorded prior and after study.

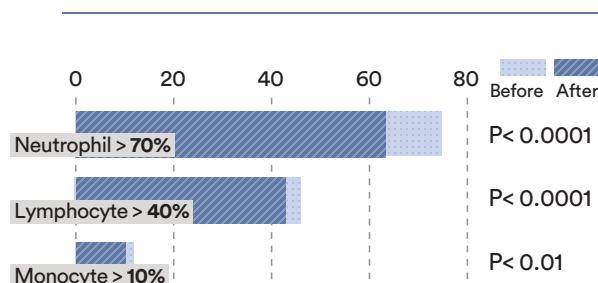
Number of leukocytes in the blood of patients before and after DefenVid® supplementation ( $N \times 10^3/\text{microl}$ )



**DefenVid®** supplementation regulates the number of blood leukocytes.

**DefenVid®** in patients with irregular leukocyte count normalizes the cellular pattern of the immune system. Those patients with high leukocyte values return to normal levels, and patients with low leukocyte levels return to values within the normal range.

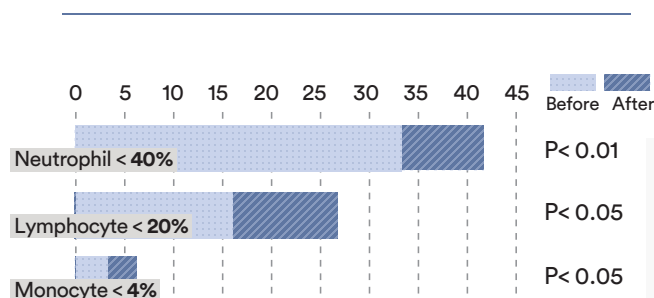
White blood cell percentage before and after DefenVid® supplementation (% White blood cells)



**DefenVid®**, supplementation readjusts the subclasses of white blood cells.

**DefenVid®**, in patients with high white blood cell percentages (subclasses), reduces the percentage of white cells in blood to reference values.

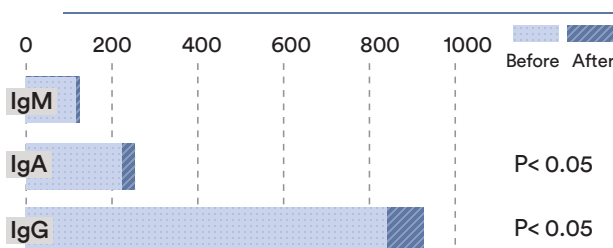
White blood cell percentage before and after DefenVid® supplementation (% White blood cells)



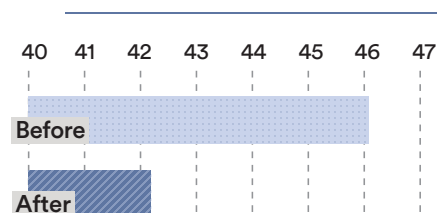
**DefenVid®**, supplementation balances the subclasses of white blood cells.

**DefenVid®**, supplementation, in patients with low white blood cell percentages (subclasses), increases the percentage of blood cells to reference values.

Immunoglobulin levels before and after DefenVid® supplementation (mg/dL)



IgE levels before and after DefenVid® supplementation (KU/L)



**DefenVid®** supplementation significantly increases the blood levels of immunoglobulins A, M and G, and reduces the levels of IgE.

IgE has an essential role in allergic diseases and also plays a pivotal role in responses to allergens.

Immunoglobulins are antibodies used by the immune system to neutralize pathogens.