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### An innovative botanical extract with proven activity



# ACTĪDO

Actido<sup>™</sup> is a pure botanical extract produced from fresh cucumbers with soothing actions, based on Natexin<sup>™</sup>, the commercial designation of the mix of different active compounds obtained by Naturalea through its patented proprietary manufacturing process which includes the full control over the entire supply chain, from the cultivars to the final product.

The unique and highly efficient extraction proccess ensures that all different active compounds composing Natexin<sup>™</sup> express their synergic action to the fullest potential.

Cytotoxicity, genotoxicity and acute oral toxicity of the extract have been tested according to the reference standards, showing that Actido<sup>™</sup> is completely safe at the tested dosage.

Actido<sup>™</sup> acts at the earliest stages of the inflammatory cascade, by suppressing the levels of TNF-a, a key regulator of the inflammatory immune response.

This activity has been documented by a full data set including in vitro and in vivo evidence.

Inflammation states are common in humans, as a results of activity, age or pathologies. A botanical extract with strong anti-inflammatory activity is a true innovation to the market, with possible

applications in the prevention and in the symptomatic treatment of inflammatory states affecting different body districts, including the joints and the skeletal musculature. Actido<sup>™</sup> is particularly indicated for athletes and sportive amateurs and also elderly people.





## Actido<sup>™</sup> is available in ready made capsules

Latest generation patented dietary supplement, in capsule form, based on active ingredient with scientifically proven efficacy, Natexin™. Steroid free, GMO free, Gluten Free, Vegan, formulated using a patented technology and designed both for sports amateurs and professional athletes, helps in an effective local and systemic emollient and soothing action.

Actido<sup>™</sup> ready made capsules are available in bulk or packed Discover co-branding and co-marketing options!

## Results

Cucumber is naturally rich of phytoconstituents with bioactive compounds, Actido™ soothing effect is due to the synergistic activity among several molecules. The proprietary manufacturing process provides a highly efficient extraction of these compounds, thus ensuring the maintenance of the synergism among the active ingredients. Natexin<sup>™</sup> acts in the early stages of inflammation, by suppressing the activity of TNF-a, a key regulator of the inflammatory immune response. (Figure 1). TNF- $\alpha$ , the most relevant cytokine in the human inflammatory system, is induced by the LPS treatment in this ex-vivo model. The addition of Actido<sup>™</sup> clearly eliminates the inflammatory effect generated by LPS.



Figure 1 - The mechanism of action. Actido<sup>™</sup> acts in the early stages of inflammation by suppressing the activity of TNF- $\alpha$ .

### **Technical datas**

Origin	Cucumis sativu
Composition	50% cucumber
	powder, corn st
Appearance	Pale yellow colo
Active Natexin <sup>™</sup> concentration	> 700 units*
Moisture	< 8%
Odour & Taste	Characteristic
Shelf life	24 months in or
Packaging	1 kg foil sachet
Dosage	between 0,05 to
	supplement do

\* Activity is measured using a biochemical method. Human dendritic cells (moDC) are stimulated with LPS to provoke TNF-α release. A batch of Actido<sup>™</sup> is positively release only if the level of TNF-α is reduced of at least 50%, when Actido<sup>™</sup> is added at 1 mg/mL.

and most used inflammation factor. The addition of LPS cause



is fructus r extract, Cucumber extract 50%, gluten free oatmeal tarch, calcium carbonate or, fine lyophilized powder

riginal closed bags ts (vacuum packed) to 1 mg/ml. Suggested human dietary sage: 100 to 300 mg per day