

Technology Offer

CSIC/VM/003

Olive oil antihypertensive peptides



New family of molecules (low-molecular weight peptides) present in olive oil with blood pressure-reducing activity for hypertensive people

Intellectual Property

Patent granted in Spain and Italy.

Stage of development

Demonstrated efficacy in an animal model of hypertension.

Intended Collaboration

Licensing and/or co-development

Contact

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Market need

Hypertension is a primary risk factor for cardiovascular disease that affects approximately 40% of adults. Angiotensin-converting enzyme (ACE) plays a key role in regulating blood pressure. ACE inhibition is a widely used strategy for the treatment of hypertension, as is the case of the drugs captopril and enalapril, widely used for their effectiveness in reducing blood pressure and controlling heart failure. For these reasons, new sources of ACE inhibitor compounds, such as inhibitory peptides, are of interest to the food and pharmaceutical industries. The presence of peptides with antihypertensive activity in olives, olive oil and by-products, has been recently described by our research group.



Proposed solution

The olive oil peptides of the invention are natural compounds that can be easily extracted from olives, olive oil or alperujo (by-product of the olive oil extraction industry) with demonstrated ACE inhibitory and antihypertensive activities. The pure peptides of the invention (synthesized) can be used to be administered in the form of a medication.

Competitive advantages

- Natural peptides extracted from olives, olive oil or “alperujo” (by-product of the olive oil extraction industry).
- Easy extraction of bioactives (low-molecular weight peptides) from the raw materials.
- Similar efficacy to ACE inhibitor drugs.
- Scientific research published in high-impact factor international journals.