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PRODUCT DETAILS OF CITRUS BERGAMIA PDNVs (ITbio-PDNVs™)

(LYOPHILIZED FORM)

Description	Citrus bergamia PDNVs (Plant-Derived
	NanoVesicles) are nano-sized vesicles
	surrounded by a lipid-enriched membrane
	and containing different natural
	compounds, including vitamins,
	antioxidants, proteins, nucleic acids and
	other metabolites. Exo Lab Italia ® purify and
	concentrate PDNVs exclusively from Citrus
	bergamia from Italian organic agriculture.
	The PDNVs are purified and concentrated
	using ultracentrifugation process in a sterile
	environment.
Origin	Citrus bergamia
PDNVs Number	2 x 10 ¹⁰
Size	182.5 +/- 1.3 nm
pH value	2.82
Form	Lyophilized
Reconstitution	Reconstitute the lyophilized PDNVs with 500-
	1000 μ l of sterile H ₂ O or PBS
	PDNVs were characterized by concentration
Characterization	and size distribution, pH value, and
	Tetraspanin-8 (TET-8) expression.
Shipping conditions	2-8°C
Storage Conditions	ITbio-PDNVs™ can be stored at +4°C for a
	short time and at -80°C for no more than 1
	year. It is recommended to aliquot PDNVs in
	the desired volume and store asap -80°C
	(active for up to 1 year). Avoid repeated
	freeze-and thaw cycles.
Applications	- For in vitro and in vivo studies
	- Loading of molecules



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	- Drug delivery system
	This product is intended for laboratory
Intended Use	research use only. It is not intended for any
	animal or human therapeutic use, any
	human or animal consumption, or any
	diagnostic use.
	Exo Lab Italia srl works in respect of the
BLS 1	normative of BLS 1
	Preparation of reconstituted PDNVs:
	1. Add 500-1000 μ l of sterile H ₂ O or PBS
	2. Mix by pipetting up and down and by
	vortexing
Handling Procedures	3. Store at 4°C short term (see Storage
	Conditions section)
nanaling roccures	4. For long term storage, prepare
	multiple aliquots for use and store at
	-20°C/-80°C (see Storage
	Conditions section), avoiding
	freeze/thaw cycles.
Material Citations	If use of this material results in a scientific
	publication, please cite the material in the
	following manner:
Material Citations	ITbio-PDNVs™ from <i>Citrus bergamia</i> by Exo
	Lab Italia at Tecnopolo d'Abruzzo (AQ) -
	Italy
References	www.exolabitalia.com
	Exo Lab Italia [®] represents and warrants:
	(i) any declaration contained in this
	document, particularly in relation
	to the identity of the PDNVs and
	its composition;
Warranty	(ii) to identify the applicable legal
	requirements under the
	legislation on protection of
	workers and environment;
	(iii) to keep track of the quantities of
	PDNVs used and to be able to



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	provide documentation (e.g., shipping documents, disposal records, process leakage information, etc.) that attests the fact that records of these quantities are kept; (iv) that PDNVs are not supplied by Exo Lab Italia ® to the public; (v) that the substance will only be handled by internal staff appointed by Exo Lab Italia ®.
Disclaimers	This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use. Any proposed commercial use is prohibited without a license from Exo Lab Italia [®] . While Exo Lab Italia [®] uses reasonable efforts to include accurate and up-to-date information on this product sheet, Exo Lab Italia [®] makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Exo Lab Italia [®] does not warrant that such information has been confirmed to be
	accurate or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information. This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the Exo Lab Italia srl product including without limitation taking all appropriate safety and handling



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precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the Exo Lab Italia *product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall Exo Lab Italia *, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, Exo Lab Italia * is not liable for damages arising from the misidentification or misrepresentation of such materials.	
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