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PRODUCT DETAILS OF PUNICA GRANATUM PDNVs (ITbio-PDNVsTM)

(LIQUID FORM)

Description	Punica granatum 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 <i>Punica granatum</i> from Italian organic agriculture. The PDNVs are purified and concentrated using ultracentrifugation process in a sterile environment.
Origin	Punica granatum
PDNVs Number	2 x 10 ¹⁰
Size	205.8 +/- 7.6 nm
pH value	2.90
Volume	1 ml
Form	Liquid
Solvent	Sterile H ₂ O
Characterization	PDNVs were characterized by concentration 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 (1-2 weeks). It is recommended to aliquot PDNVs in the desired volume and store asap at either -20°C (active for up to 6 months) or -80°C (active for up to 1 year). Avoid repeated freeze-and thaw cycles.
Applications	 For <i>in vitro</i> and <i>in vivo</i> studies Loading of molecules Drug delivery system
Intended Use	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.
BLS 1	Exo Lab Italia srl works in respect of the normative of BLS 1
Handling Procedures	 Preparation of PDNVs: 1. Mix by pipetting up and down 2. Store at 4°C short term (see Storage Conditions section) 3. For long term storage, prepare multiple aliquots for use and store at -20°C/-80°C (see



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	Storage Conditions section), avoiding
	freeze/thaw cycles
	If use of this material results in a scientific
	publication, please cite the material in the following
Material Citations	manner:
	ITbio-PDNVs [™] from <i>Punica granatum</i> by Exo Lab
References	Italia at Tecnopolo d'Abruzzo (AQ) - Italy 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;
	(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
Warranty	used and to be able to provide
U U	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
	®.
	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
Disclaimers	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 precautions to



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