

Chapter 7

Service and Collaborations

Summary chapter 7

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Services and collaborations

Experience: Being the oldest company entirely dedicated to Extracellular Vesicle research since 2007, Our scientists have over 10 years of experience in EV area, high background in molecular and cell biology, in cancer research, and development of diagnostics.

Custom design: We will custom design your solution to meet your specific requirements. We are part of an international network of key opinion leaders, life science and biotech experts.

High project management skills: Ensuring a successful outcome begins and ends with managing our client's projects. We have a deep expertise in project management, participating in the framework of international projects together with Academic and Industrial partners.

Extracellular Vesicle isolation and purification

HansaBioMed Life Sciences provides high expertise in Extracellular Vesicles purification from human or animal biofluids, cell conditioned media, microbial cultures and plants. EV purification can be obtained following our standard protocol which combine tangential flow filtration and SEC. Isolated EVs are subsequently quantified for total protein contents and validated by nano tracking analysis (NTA) with the Zetaview equipment (Particle Metrix). Purified EVs can be shipped to the customer lyophilized or frozen, as required.

Extracellular Vesicle isolation and purification			
Service	Material	Standard method	Alternative methods
Small and Large EVs purification	Cell conditioned media, including MSC.	Tangential flow filtration and size exclusion chromatography	Ultracentrifugation Immunoaffinity Chemical precipitation
	Human or animal biofluids (plasma, serum, urine, CSF, saliva, milk)		
	Plants (fruits and vegetables)		
	Microbe cultures (bacteria, parasites)		

Extracellular Vesicle characterization and phenotyping

Services for characterization of the Extracellular vesicles, analysis of particle size distribution and concentration, OMICS analyses, biomarker discovery.

Extracellular Vesicle characterization and analysis		
Service	Material	Method available
Particle size distribution, concentration, zeta potential.	Purified EVs	Nanoparticle tracking analysis (NTA) in scattered or fluorescence mode (Zetaview, Particle Metrix). DLS analysis.
Flow cytometry	Purified EVs	Analysis by NanoFCM analyzer.
Transmission Electron Microscopy (TEM)	Purified EVs	EV image, immunoEM.
EV phenotyping	Purified EVs, raw material	ELISA high throughput marker screening

Extracellular Vesicle OMICS		
Service	Material	Method available
Mass spectrometry	Purified EVs	Sample preparation and Q Exactive Plus 2h nano-LC/MS/MS analysis with MaxQuant-based identification and quantitation.
miRNA sequencing	Purified EVs	Library preparation with Nextflex kit. Sequencing done by Illumina Nextseq 500

Custom products

HansaBioMed Life Sciences can design and create a personalized kit by choosing from a wide variety of reagents and tools in our catalog.

Custom products	
Product	Description
Custom ELISA immunoplates	ELISA plates can be covalently coated with EV-binding antibodies. 1- Transparent, white and black plates are available. 2- Coating antibody can be chosen by our antibody list (see section 6) or sent to HBM by customers.
Custom immunobeads	Latex immunobeads will be covalently coupled with the antibodies chosen from our antibody list, or sent to HBM-LS by customers. We provide the following product sizes: 1- Immunobeads for 10 reactions 2- Immunobeads for 20 reactions 3- Immunobeads for 50 reactions
Custom ExoTEST	Customer can customize our ExoTEST platform choosing ELISA plate and detection antibody (see section 3, Quantification kits)
For other Custom made solutions and for information contact us at info@hansabiomed.eu or visit our website	

Other services and project collaboration

HansaBioMed Life Sciences is open for collaboration with private or academic partners in research activities related to different fields of exosome research and applications. Contact us for:

Service and project collaboration	
Service	Description
Biomolecule labeling and modification	We can provide biomolecule modifications such as: protein labeling with fluorescence dyes, conjugation of biomolecules with affinity ligands, PEGylation of biomolecules, immobilization of biomolecules on different surfaces (hydrogels, molded polymers, synthetic membranes) etc.
New assays for marker discovery	We can develop personalized ELISA assays for a specific exosome protein marker quantification or qPCR assays for identification of miRNA and DNA markers.
Development of tools for capturing and enriching specific exosome subpopulations	We can develop tools for capturing and isolating specific exosome subpopulations to improve comprehensive exosome profiling in diseases.
Projects and collaborations and technical consulting	Contact us for: OEM product development, cell free regenerative medicine, collaboration in research projects (Horizon 2020, Eurostars, NIH grants, etc).



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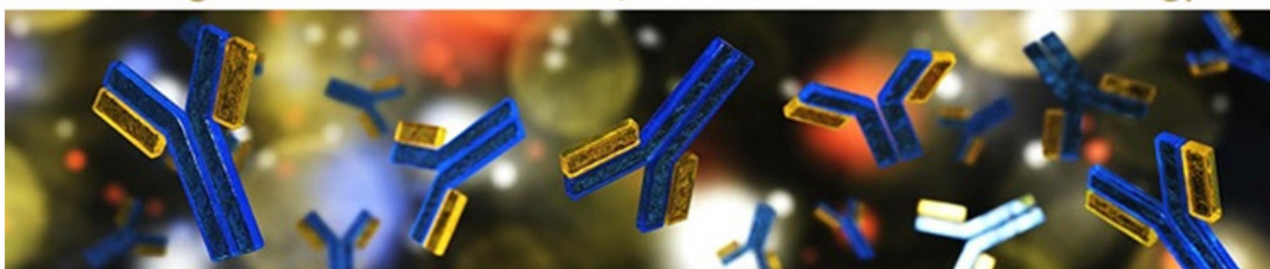
Distribution of HansaBioMed Life Sciences products in South Korea



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Distribution of HansaBioMed Life Sciences products in Italy