Workflow in Exosome studies

Overview

Excilone offers an expertise in isolation of extracellular vesicles (EVs) and Exosomes, their characterization, and analysis of their nucleic acid (mRNA, miRNA, DNA), protein and lipid content.

Proposed procedure in Exosome studies:
- Isolation of the extracellular vesicles and their subpopulations (exosomes, microvesicles, etc.)
- Morphological and morphometric validation of the EV sub-populations by Transmission Electron Microscopy (TEM) with negative staining
- Measurement of size distribution and particle concentration by DLS, NTA or TRPS
- Determination of the EV/Exosomal protein concentration
- Detection of the specific EV/Exosome protein markers by Western blotting and ELISA
- Analysis of exosome protein content by LC-MS/MS approach and nucleic acid composition (mRNA, miRNA) by NGS and RT-PCR
- Feasibility study

EVs origin

- Biological fluids (blood serum/plasma, urine, saliva, milk, etc.)
- Bacterial and parasite supernatants
- Cell culture supernatant

Service for single cell and Exosome isolation