Core Facility Flow Cytometry - Extracellular Vesicles
Philipps University Marburg - Center for Tumor Biology and Immunology
Contact: Dr. Christian Preußer - preusserc@staff.uni-marburg.de

MAREVA

Marburger Requirements for EV Analysis

The information provided here is intended to ensure scientific quality to make valid statements about any study involving EVs. In general, compliance with the MISEV Guidelines, which are supported by the Core Facility, can be referred to.

If data that is generated by the EV Core Facility is supposed to be used for a publication, the following points should be considered:

General requirements:

1. Refer to the generic term extracellular vesicle (EV) instead of using exosomes, microvesicles, etc. if it cannot be proven that the particles analyzed refer to specific subclasses
2. Detailed report on source/origin as well as the purification method
3. Include at least one physical, one phenotypical, and one imaging technique to characterize your EVs

   Physical: size and concentration

   NTA, **NanoFCM**, DLS

   Phenotypical: biochemical composition

   NanoFCM, **Bead-flow**, **Western Blot analysis**, MS

   Imaging: Integrity and purity

   TEM, Cryo-EM, or any high-resolution microscopy technique

4. Consider your statements about the constituents/functions of EVs:

   The purification method may have a significant impact on the composition of the EVs and thus on their function.

5. If analyzing the nucleic acid content of EVs perform an RNAse/DNAse treatment together with proteinase, to allow access of nucleases to protein-shielded nucleic acids.