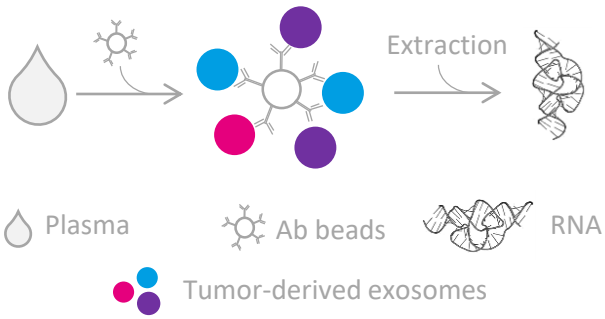
SoRTEV™ RNA Enrichment Kit

From plasma to RNA - This kit allows the purification of tumor-derived exosome RNA.

Technical Specifications	
Category	Pre-analytical
Isolation Method	Exosomics proprietary antibody affinity method
Sample type	Plasma
Number of reactions	24 reactions
Sample Volume	From 0,5 ml up to 2 ml
	0,5-2 ml: SoRTEV™ Low Volume (Cat. No. EXO-SOR-LV)

For quotations or information please contact us at orders@exosomics.eu

HOW IT WORKS



-Antibody coated beads pull down tumor-derived exosomes selectively;

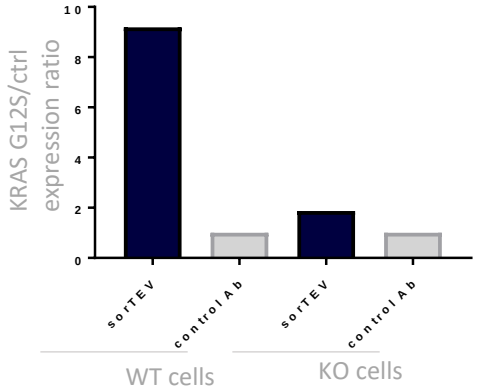
-Best pre-analytical method to harvest the purest tumor-derived RNA from biofluids;

-It's easy, does not require complex ultracentrifugation or chromatography steps;

-Enables the next generation of RNA-based tumor diagnostics assays.

Key Performance metrics #1: SoRTEV™ – Specificity

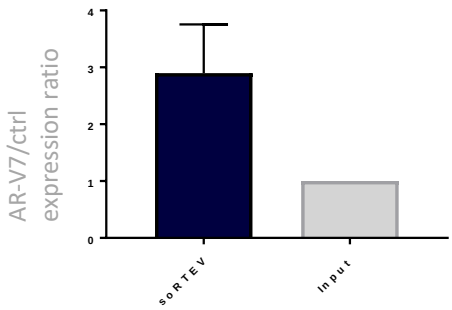
Tumor exosomes from supernatants obtained from KRAS G12S-positive wild type and target knock-out cells using SoRTEV™ antibody or its isotype-matched control antibody. KRAS G12S mRNA expression was quantified by real-time PCR and normalized for an internal control.



KRAS G12S mRNA was enriched more than 9 fold using SoRTEV™ tumor specific antibody in comparison to the isotype matched control antibody. This enrichment was almost completely abrogated in supernatants from cell knocked out for SoRTEV™ target, confirming the specificity of SoRTEV™ antibodies.

Key Performance metrics #2: SoRTEV™ – Mutation Enrichment

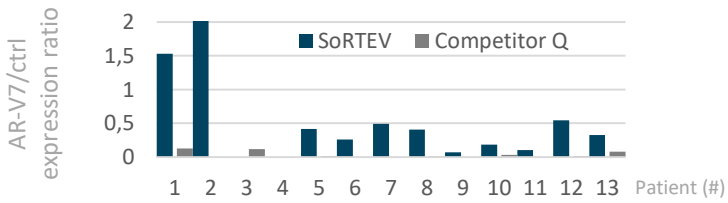
Tumor exosomes containing AR-V7 mRNA were spiked into healthy donor plasma and isolated using SoRTEV™ technology. AR-V7 mRNA expression was quantified by ddPCR and normalized for a generic EV-specific RNA control.



AR-V7 mRNA was enriched 3 fold using SoRTEV™ tumor specific antibody in comparison to the exosome input, indicating tumor selective enrichment.

Case study #1: SoRTEV™ – Androgen Receptor V7 (AR-V7) Detection

Plasma was withdrawn from thirteen prostate cancer patients and then processed with either SoRTEV™ or Competitor Q to obtain RNA. The ratio between AR-V7 and a control (ctrl) mRNA was tested by RT-dPCR (Thermo®).



AR-V7 mRNA can be detected when SoRTEV™ is used as the pre-analytical step whilst it is not or barely detectable when Competitor Q is used. High levels of AR-V7 correlate with poor response to first and second line novel hormonal therapy in castration-resistant prostate cancer. Data generated by University of Brescia, Italy.