Proteomic profiling of rhabdomyosarcoma-derived exosomes yield insights into their functional role in paracrine signaling

Ghina Rammal[1,2], Assil Fahs[1,2], Firas Kobeissy[3], Yehia Mechref [4], Jingfu Zhao[4], Rui Zhu[4], Mona Diab-Assaf[5], Raya Saab[2,6*], Sandra Ghayad[1*].

[1] Department of Biology, Faculty of Science II, EDST, Lebanese University, Fanar, Lebanon.

[2] Department of Anatomy, Cell Biology and Physiology, American University of Beirut, Beirut, Lebanon.

[3] Department of Biochemistry & Molecular Genetics, Faculty of Medicine, American University of Beirut, Lebanon.

[4] Department of Chemistry & Biochemistry, Texas Tech University, Lubbock, United States.

[5] Department of Chemistry and Biochemistry, Faculty of Sciences II, EDST, Lebanese University, Fanar, Lebanon.

[6] Department of Pediatric and Adolescent Medicine, American University of Beirut, Beirut, Lebanon.

***Co-correspondence to:**

Sandra E. Ghayad, Lebanese University, Faculty of Science II, Department of Biology, Fanar, Jdeidet, P.O. Box 90656, Lebanon. Phone: +961-1-686981. Fax: +961-1-377384. Email: sandra.ghayad@ul.edu.lb

Raya Saab, American University of Beirut, Pediatric Hematology/Oncology, Riad El Solh Street, Beirut 1107 2020, Lebanon. Phone: +961-1-350000, ext. 4780. Fax: +961-1-377384. Email: rs88@aub.edu.lb

SUPPORTING INFORMATION:

The following supporting information is available free of charge at ACS website http://pubs.acs.org

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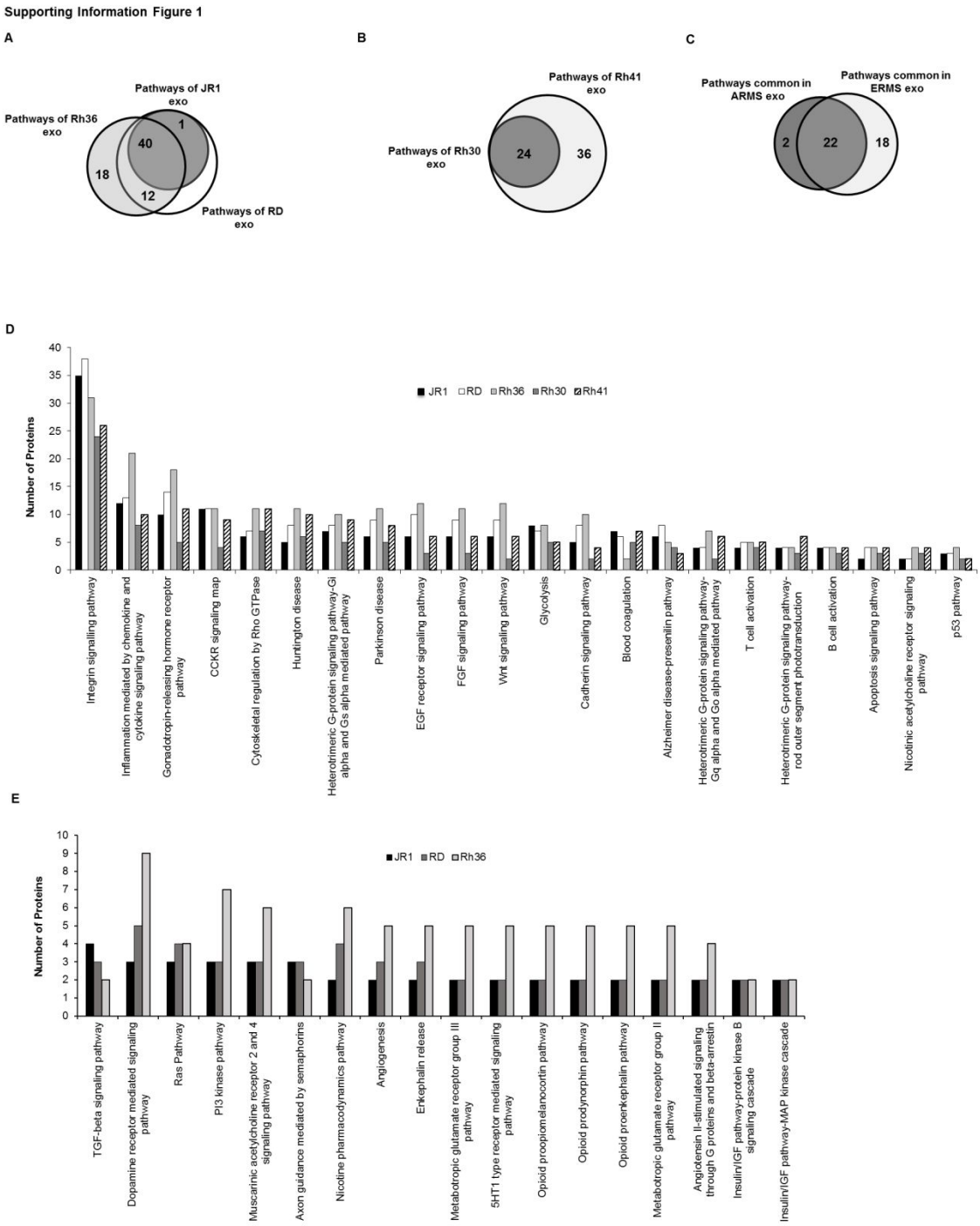
Supplementary Figure S1. Exosome protein cargo is implicated in cancer-related biological pathways as identified by PANTHER gene classification. (A-C) Venn diagrams of pathways involving the exosomal protein cargoes of (A) the 3 ERMS cell lines; (B) the 2 ARMS cell lines; and, (C) the common ERMS and ARMS cell lines, as specified. (D) Histograms presenting the common ERMS and ARMS pathways with the number of proteins involved in each pathway. (E) Histograms showing the pathways exclusive to the ERMS-derived exosomes.

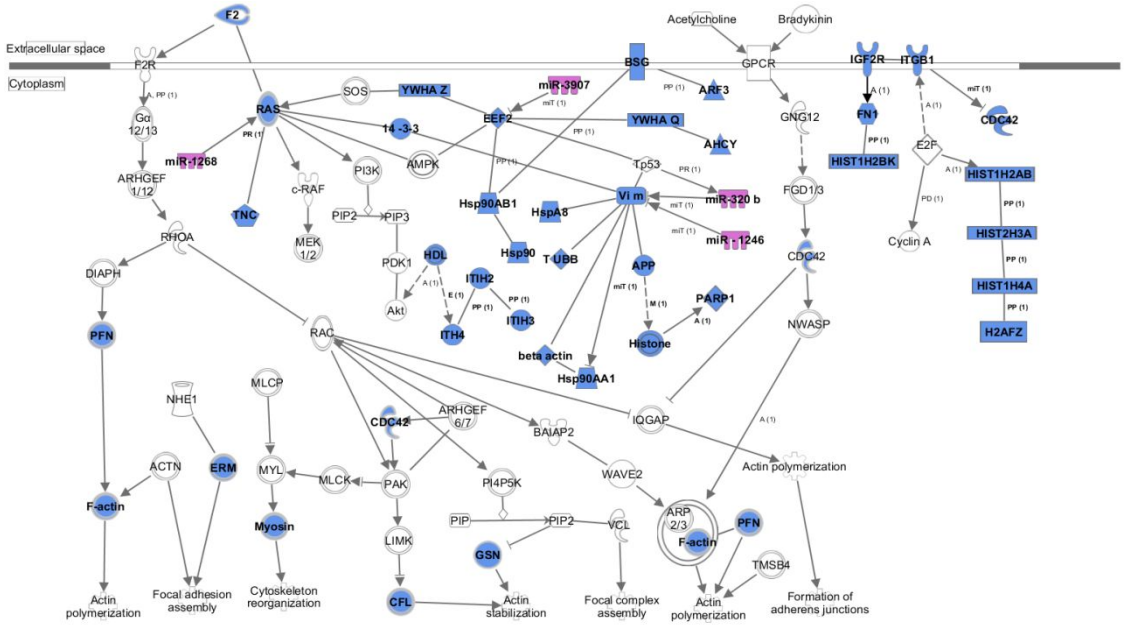


Supplementary Figure S2. Network analysis by IPA of the commonly expressed proteins and miRNAs in ERMS and in ARMS exosomes. (A) Network representing the relation between the 122 common exosomal proteins and 62 common exosomal miRNA between the 2 ARMS cell lines: Rh41 and Rh30. (B) Network representing the relation between the 161 common exosomal proteins and 2 common exosomal miRNA between the 3 ERMS cell lines: JR1, RD, and Rh36. Nodes in blue and pink correspond to exosomal proteins and exosomal miRNA found within each subtype, respectively. Non-colored nodes were proposed by IPA and suggest potential targets functionally coordinated with the differential proteins. Solid lines indicate direct molecular interactions and dashed lines represent indirect relationships. A:

Activation; E: Expression; M: Modification; miT: RNA-RNA interactions: microRNA targeting ; PD: protein-DNA interactions ; PR: protein-RNA interactions ; PP: protein-protein interactions.

Supporting Information Figure 2

A



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