# Evidence for Enhanced Exosome Production in Aromatase Inhibitor-Resistant Breast Cancer Cells 

Giuseppina Augimeri ${ }^{1, t,}$ Giusi La Camera ${ }^{1, t,}$ Luca Gelsomino ${ }^{1}$, Cinzia Giordano 1,2, Salvatore Panza ${ }^{1}$, Diego Sisci ${ }^{1}$, Catia Morelli ${ }^{1}$, Balázs Győrffy ${ }^{3,4}$, Daniela Bonofiglio ${ }^{1,2}$, Sebastiano Andò ${ }^{1,2, \ddagger}$, Ines Barone ${ }^{1, *, \ddagger}$ and Stefania Catalano ${ }^{1,2, *, \ddagger}$<br>1 Department of Pharmacy, Health and Nutritional Sciences, Via P Bucci, University of Calabria, 87036 Arcavacata di Rende (CS), Italy; giusy.augimeri@gmail.com (G.A.); giusylacamera93@gmail.com (G.L.C.); luca.gelsomino@unical.it (L.G.); cinzia.giordano@unical.it (C.G.); sasapanza@libero.it (S.P.); dsisci@unical.it (D.S.); catia.morelli@unical.it (C.M.); daniela.bonofiglio@unical.it (D.B.)<br>${ }^{2}$ Centro Sanitario, Via P Bucci, University of Calabria, 87036 Arcavacata di Rende (CS), Italy<br>${ }^{3}$ Bioinformatics and 2nd Department of Pediatrics, Semmelweis University, 1094 Budapest, Hungary; zsalab2@yahoo.com (B.G.)<br>4 TTK Cancer Biomarker Research Group, 1117 Budapest, Hungary<br>* Correspondence: ines.barone@unical.it (I.B.); stefania.catalano@unical.it_(S.C.); Tel.: +39-0984-496216 (I.B.); +39-0984-496207 (S.C.)<br>$\dagger$ These authors contributed equally to this work.<br>$\ddagger$ Joint senior author.



Figure S1. Evaluation of apoptosis in MCF-7 and MCF-7 LTED cells. (a) Terminal deoxynucleotidyk transferase-mediated dUTP nick end labeling (TUNEL) staining in MCF-7 and LTED cells in serum-free medium for 48h. DAPI was used for nuclear staining; (b) Immunoblot analysis of PARP and cleaved-PARP protein levels from total MCF-7 and LTED cellular extracts. $\beta$-Actin was used as a control for equal loading and transfer. The histograms represent the mean $\pm$ SD of three separate experiments in which band intensities were evaluated in terms of optical density arbitrary units (OD) and expressed as fold over MCF-7 cells. n.s., nonsignificant.

Table S1. Oligonucleotide primers used in this study.

| Gene Symbol | Gene Name | Primer Sequences |
| :---: | :---: | :---: |
| RAB3D | Member RAS oncogene family RAB3D | For 5'- TCAAGACCGTCTACCGCCAT -3' |
|  |  | Rev 5'- CTTGATTTGCGTGGCCCAGTC -3' |
| RAB5A | Member RAS oncogene family RAB5A | For 5'- CTAGTCGAGGCGCAACAAGA -3' |
|  |  | Rev 5'- GGGTTAGAAAAGCAGCCCCA -3' |
| RAB5B | Member RAS oncogene family RAB5B | For 5'- CGGAGCCCCAGGAGTGTT -3' |
|  |  | Rev 5'- CACTGCAGATTCTCCCAGCA - $3^{\prime}$ |
| RAB6A | Member RAS oncogene family RAB6A | For 5'- GCCCGTGCAAATGTATCTGTG -3' |
|  |  | Rev 5'- GACCCGCAGTATCCCACAG -3' |
| RAB7A | Member RAS oncogene family RAB7A | For 5'- CCTCGAAAACAGACAAGTGGC - $3^{\prime}$ |
|  |  | Rev 5'- ATTCCGTGCAATCGTCTGGA -3' |
| RAB11A | Member RAS oncogene family RAB11A | For 5'- ACGTCATCTCAGGGCAGTTC-3' |
|  |  | Rev 5'- GAGAAACAATGCGGTAAATCTCTGT -3' |
| RAB12 | Member RAS oncogene family RAB12 | For 5'- TCATCATTATCGGCTCCCGC -3' |
|  |  | Rev 5'- TTGAAGTCAACACCCACGGT -3' |
| RAB14 | Member RAS oncogene family RAB14 | For 5'- ACCATGGCAACTGCACCATA -3' |
|  |  | Rev 5'- TCCTACTCCCATGTCCCCAAT -3' |
| RAB18 | Member RAS oncogene family RAB18 | For 5'- ACTTGCAGCAACAATAGGTGT -3' |
|  |  | Rev 5'- TAACACCCTGTGCACCTCTA -3' |
| RAB21A | Member RAS oncogene family RAB21A | For 5'- AACGACAAGCACATCACCAC -3' |
|  |  | Rev 5'- TCTTGACCTGCCGTATCCCAT -3' |
| RAB22A | Member RAS oncogene family RAB22A | For 5'- TCAACCCAACAATAGGGGCA -3' |
|  |  | Rev 5'- ATTATAGCTGCAGCCGACCC - $3^{\prime}$ |
| RAB23 | Member RAS oncogene family RAB23 | For 5'- TCCCGGGTTGTGCCTTACT -3' |
|  |  | Rev 5'- TCTTCССТСТСAAATCGCTGGG-3' |
| RAB24 | Member RAS oncogene family RAB24 | For 5'- GAGATCGGGGTTTGCCTCCC -3' |
|  |  | Rev 5'- CGGCCCCGATGGTGTTCT -3' |
| RAB27B | Member RAS oncogene family RAB27B | For 5'- ATAAGTAGCTGTCCCCGTGC - $3^{\prime}$ |
|  |  | Rev 5'- GATGGTCTTGGTCGGTCAGC - $3^{\prime}$ |
| RAB32 | Member RAS oncogene family RAB32 | For 5'- CATCGCGGGGCAGGAG -3' |
|  |  | Rev 5'- AGAGGACAGCAGGGATAGGG -3' |

