

Georgess *et al.*

SUPPLEMENTARY DATA LEGENDS

Figure S1. Expression ratios of the 115 genes highly expressed in OCs and not expressed in Mo, DCs and DC-MGCs as quantified by GeneChip® microarray. The value of each gene corresponds to the \log_{10} of the ratio resulting from dividing the average expression in OCs by the average expression in Mo, DCs and DC-MGCs described in Fig. 2A. Red arrows indicate genes already known for regulating of OC functions.

Figure S2. Expression values (arbitrary units) of the 115 genes highly expressed in OCs. (Mo-OCs in green; DC-OCs in violet) and not expressed (i.e. below average gene expression within each cell type) in Mo (blue), DCs (red) as quantified by GeneChip® microarray. Stacked bars depict the mean values of expression of a given gene per cell type.

Figure S3. RhoE^{gt/gt} OCs have normal cell spreading and surface expression of integrin subunits αV and $\beta 3$. (A) Surface area (μm^2) of F-actin-stained BM-OC micrographs measured manually using ImageJ software. The whisker-box plot depicts minimum and maximum (whiskers), 25% and 75% quartiles (lower and upper limits of boxes) and median (midline of boxes) of surface areas. Because, in culture, OCs exhibiting clusters, rings and SZ-like are heterogeneous in size, the values were plotted in a \log_{10} scale. (B) Flow cytometry analysis of the surface expression of αV (left panels) and $\beta 3$ (right panels) integrin subunits in RhoE^{+/+} (green) and on RhoE^{gt/gt} (red) BM-OCs. Isotype control staining is shown in dark purple.

Figure S4. Protein expression levels of essential podosome components are unchanged in RhoE^{gt/gt} compared to RhoE^{+/+} OCs. Immunoblotting of cortactin, paxillin, and vinculin of total cell lysates from day-5 BM-OCs.

Figure S5. Mypt1 phosphorylation is not Rock-dependent in OCs. OCs were serum-starved for 2h then serum-induced for 2h with or without 30 μM Y-27632. Rock-I inhibition resulted in decreased phosphorylation of Cofilin on Serine 3 (normalized over total Cofilin) and did not affect Mypt1 phosphorylation on Threonine 696 (normalized over total Mypt1).

Figure S1

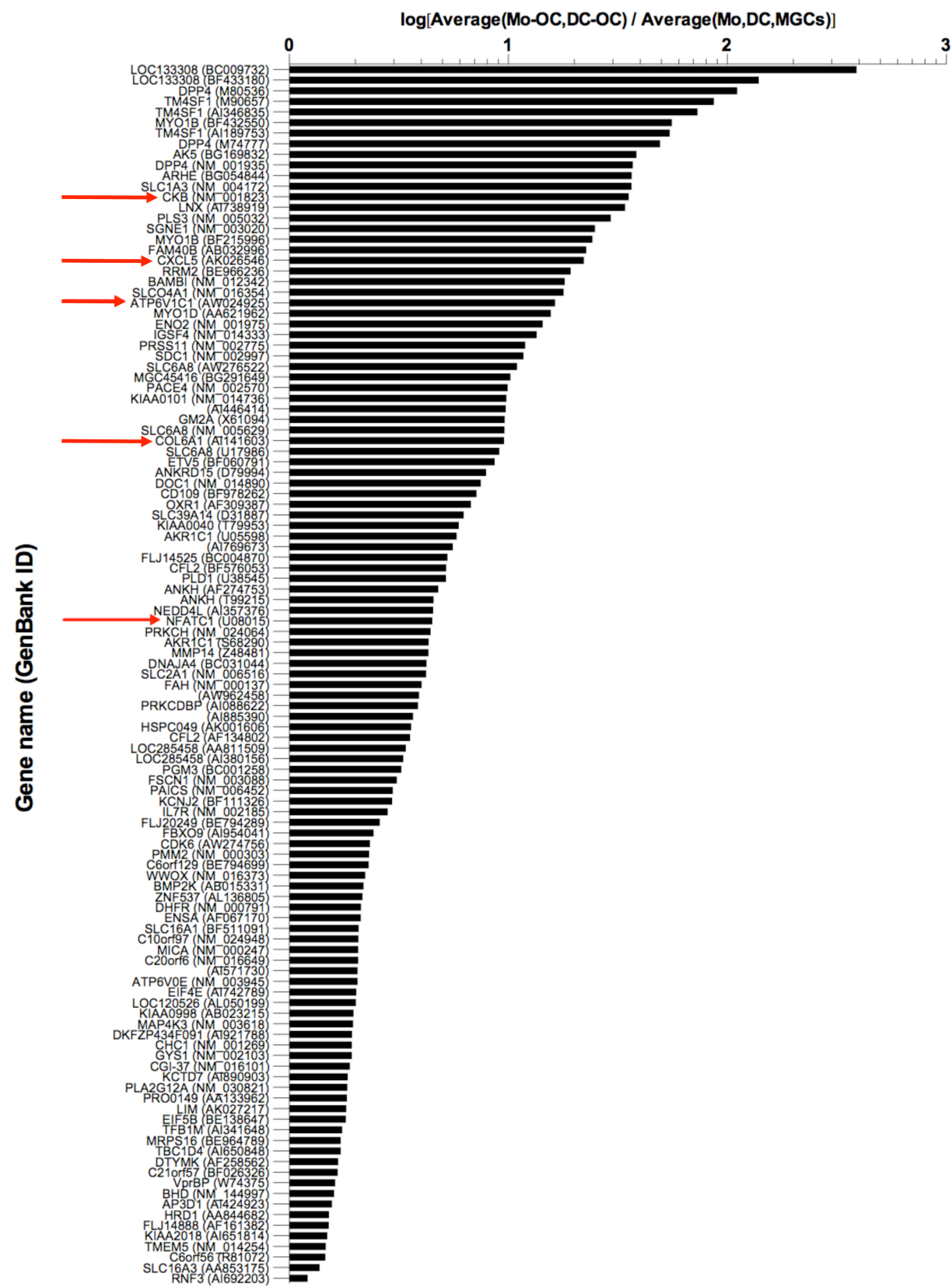


Figure S2

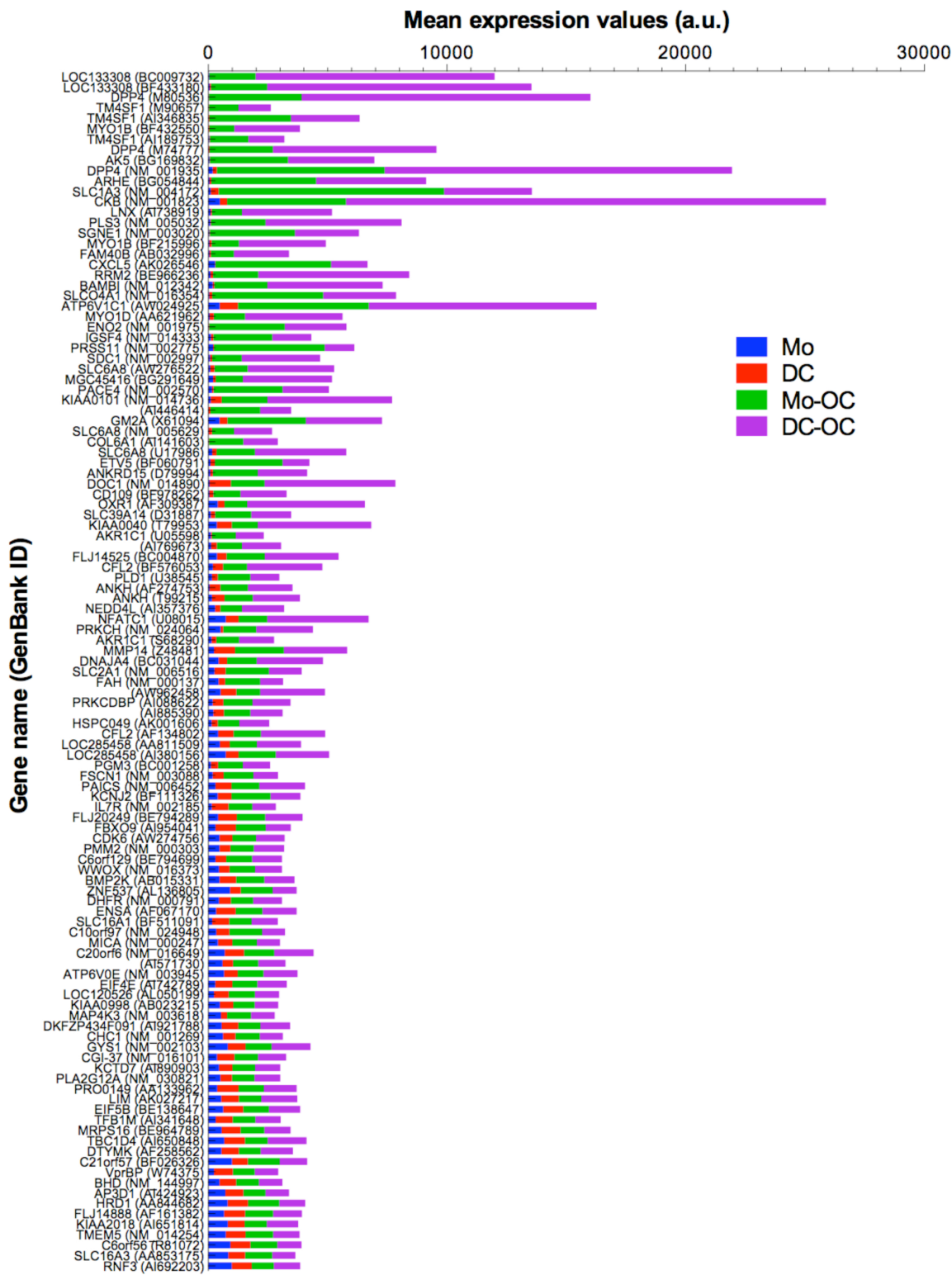


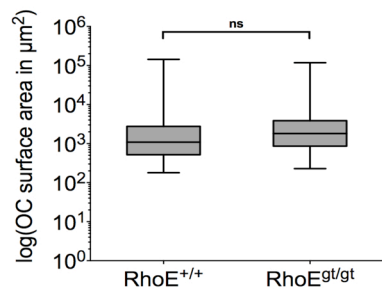
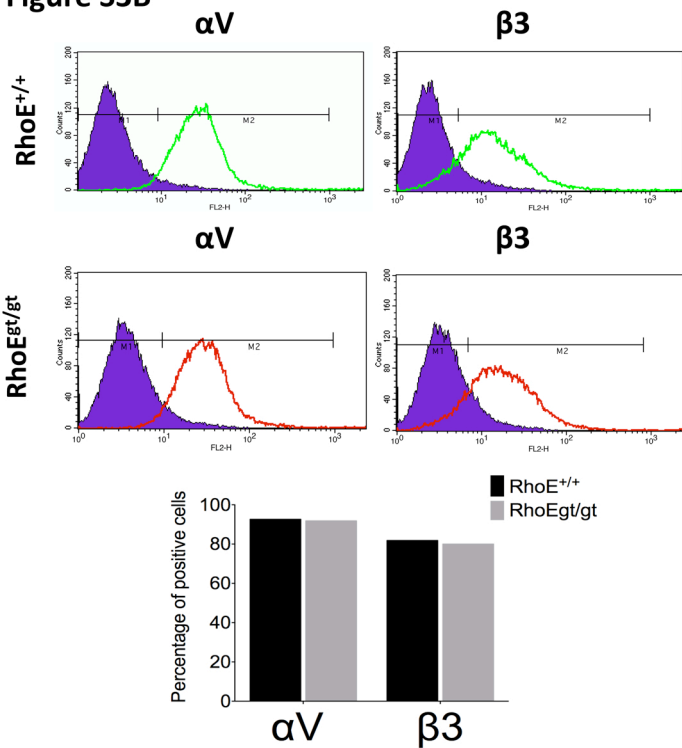
Figure S3A**Figure S3B**

Figure S4

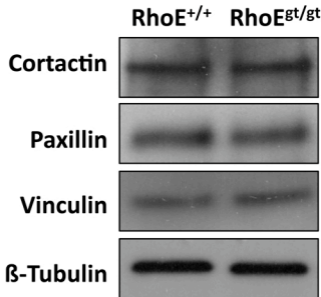
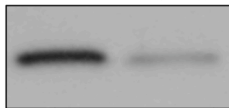


Figure S5

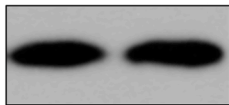
RhoE^{+/+}

Ctrl Y-27632
(30 μ M)

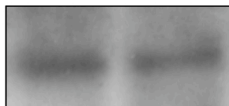
p(Ser3)-cofilin



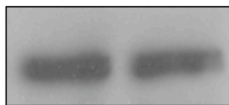
Total cofilin



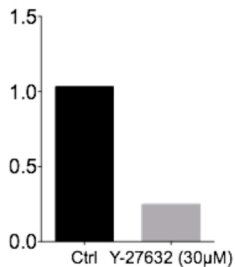
p(Th696)-Mypt1



Total Mypt1



Relative quantity
p(Ser3)-Cofilin /total Cofilin



Relative quantity
p(Th696)-Mypt1 /total Mypt1

