

Supplementary material

The Expression of Adipogenic Marker Is Significantly Increased in Estrogen-Treated Lipedema Adipocytes Differentiated from Adipose Stem Cells In Vitro

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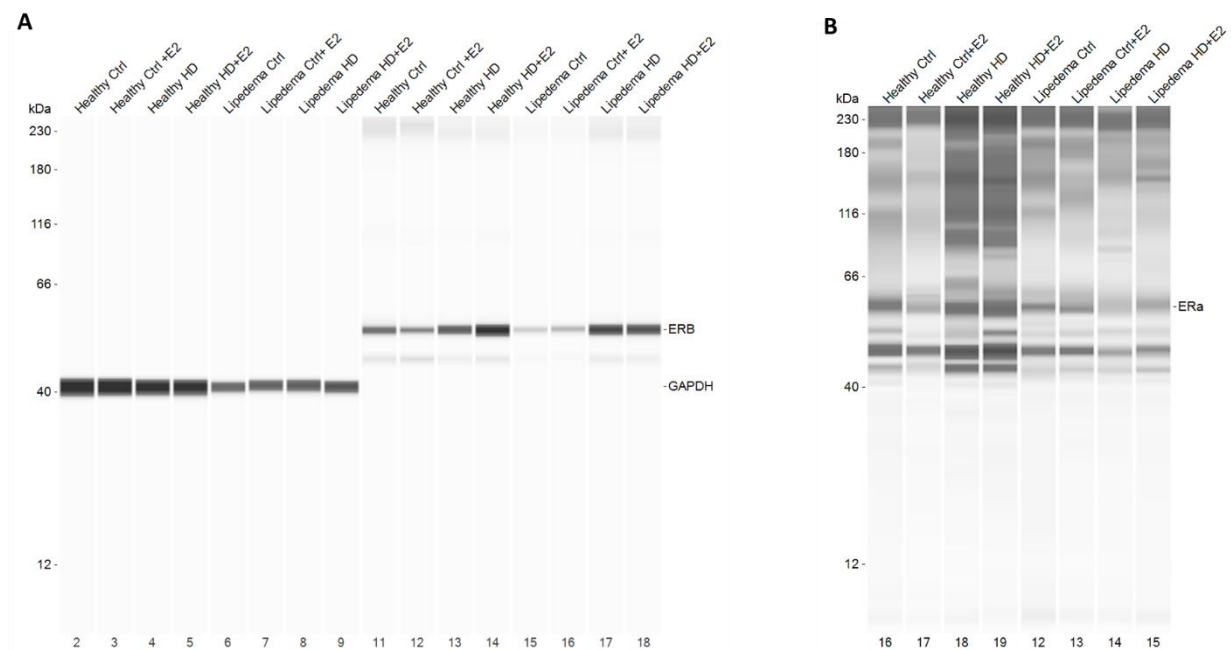


Figure S1. Western Blot showing the expression of (A) GAPDH (capillaries 2-9) and ERβ (capillaries 11-18) and (B) ERα in healthy and lipedema ASCs in 2D monolayer culture. The samples were run on a 12-230 kDa capillary kit.

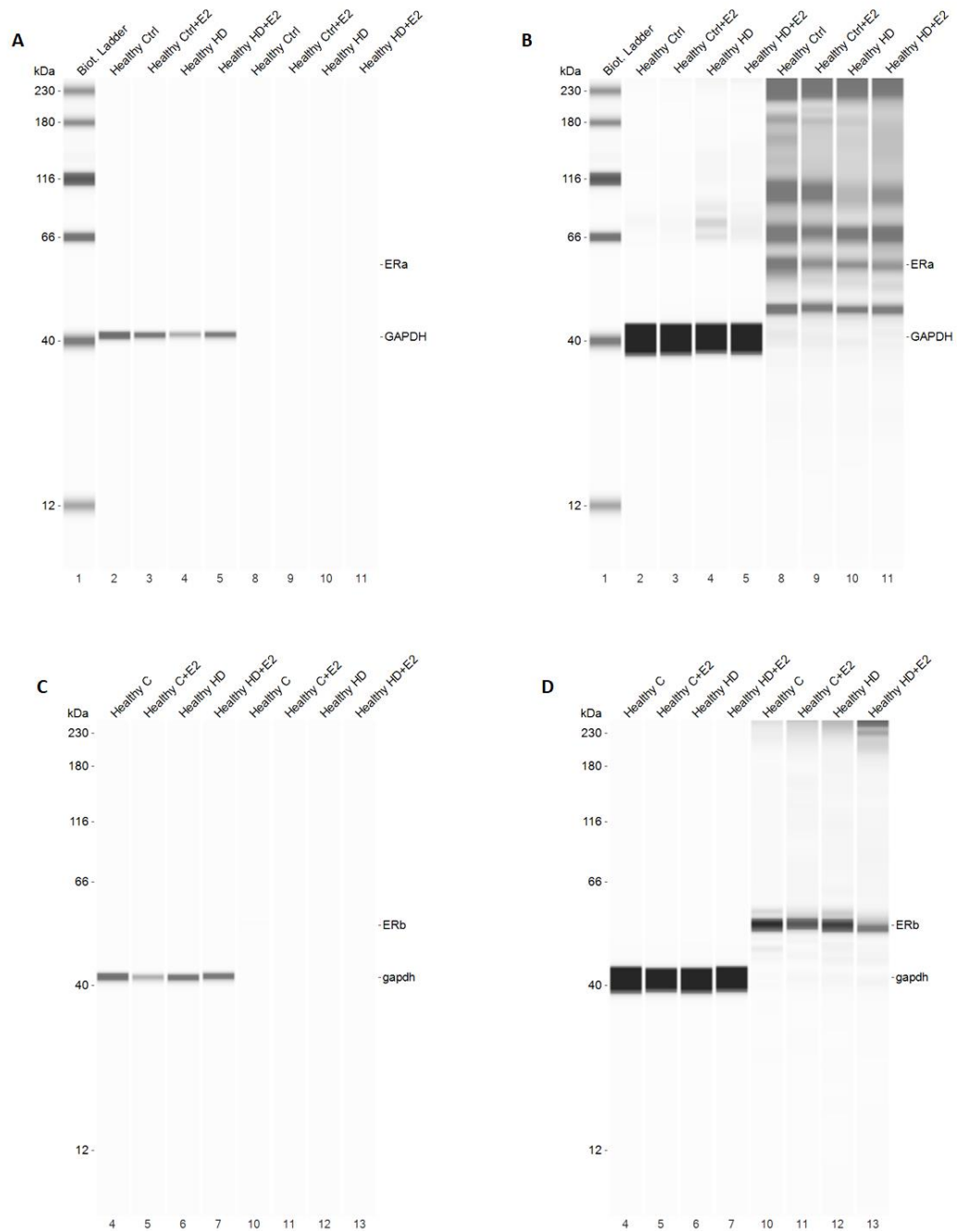


Figure S2. Western Blot showing the expression of (A, B) ER α and GAPDH and (C, D) ER β and GAPDH in healthy spheroids. The samples were run on a 12-230 kDa capillary kit. A-B, and C-D are different exposures of the same run.

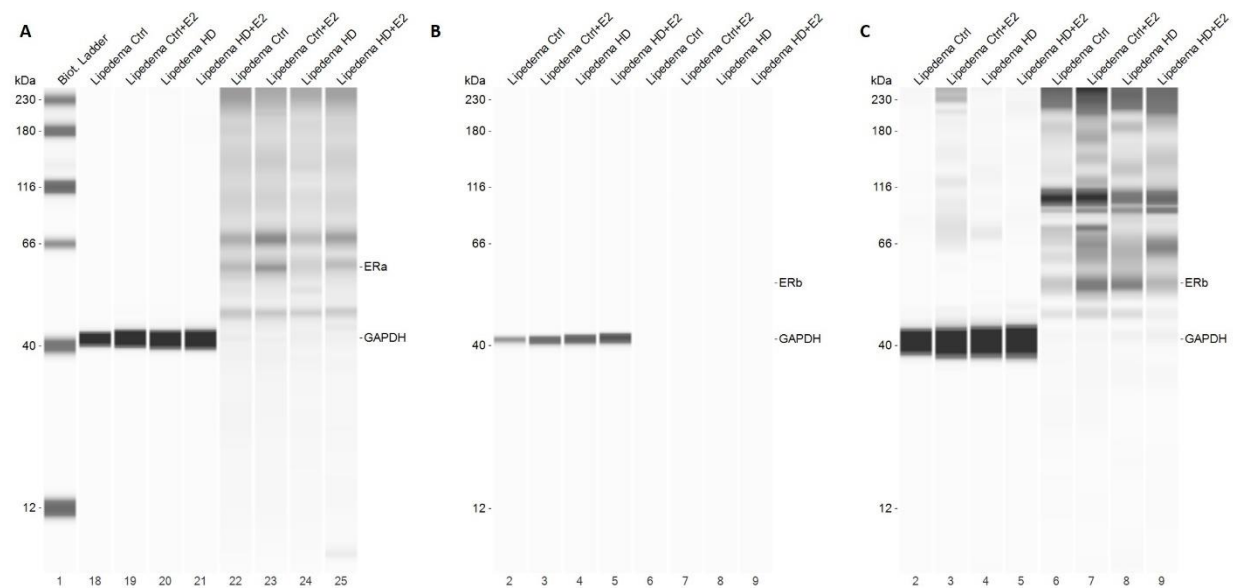


Figure S3. Western Blot showing the expression of (A) ER α and GAPDH and (B, C) ER β and GAPDH in lipedema spheroids. The samples were run on a 12-230 kDa capillary kit. B,C are different exposures of the same run.

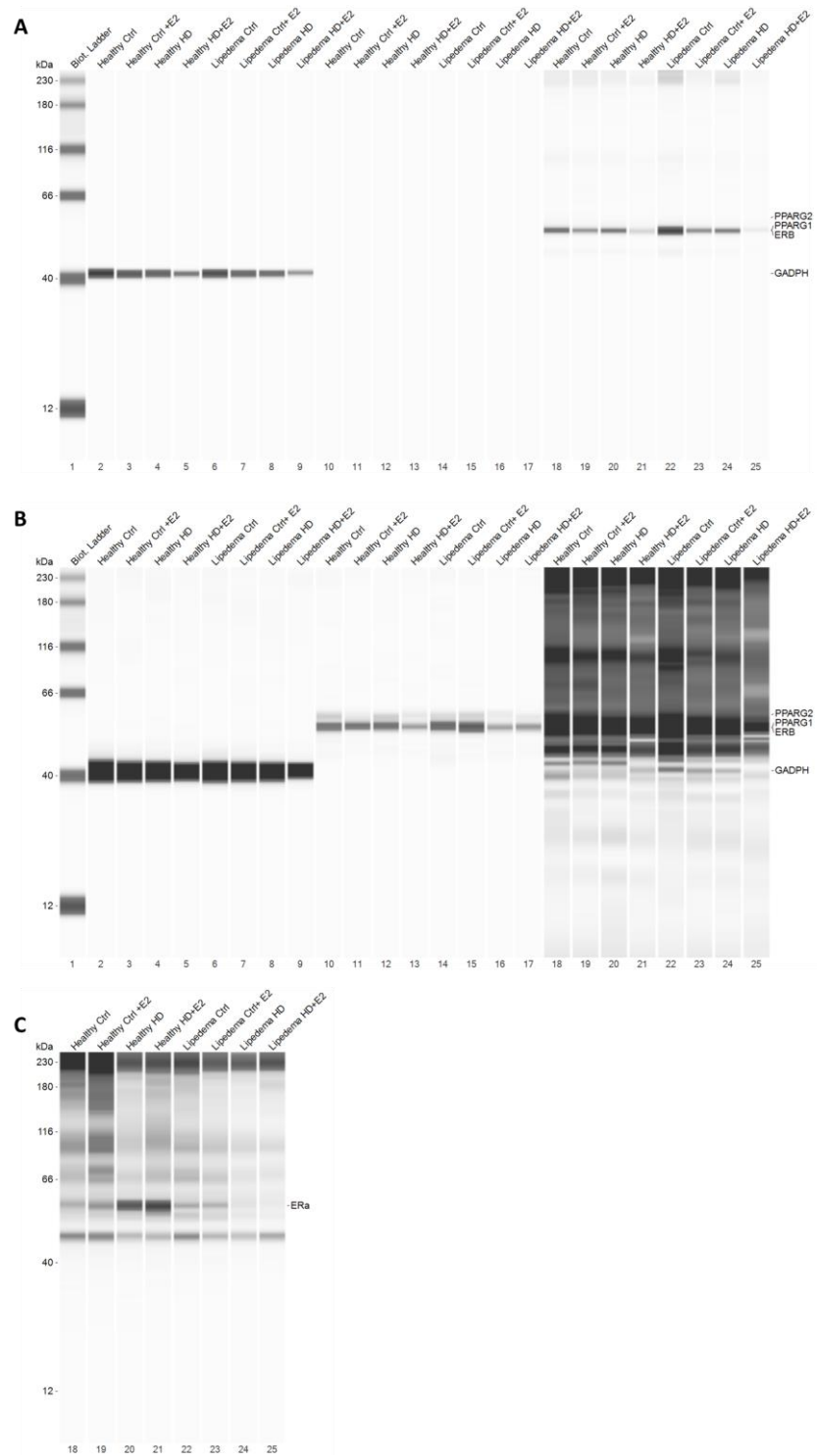


Figure S4. A, B. Western Blot showing the expression of GAPDH (capillaries 2-9), total PPARγ (capillaries 10-17), ERβ (capillaries 18-25), and C. Western Blot showing the expression of ERα in healthy and lipedema adipocytes in 2D monolayer cultures. The samples were run on a 12-230 kDa capillary kit. A-B are different exposures of the same run.

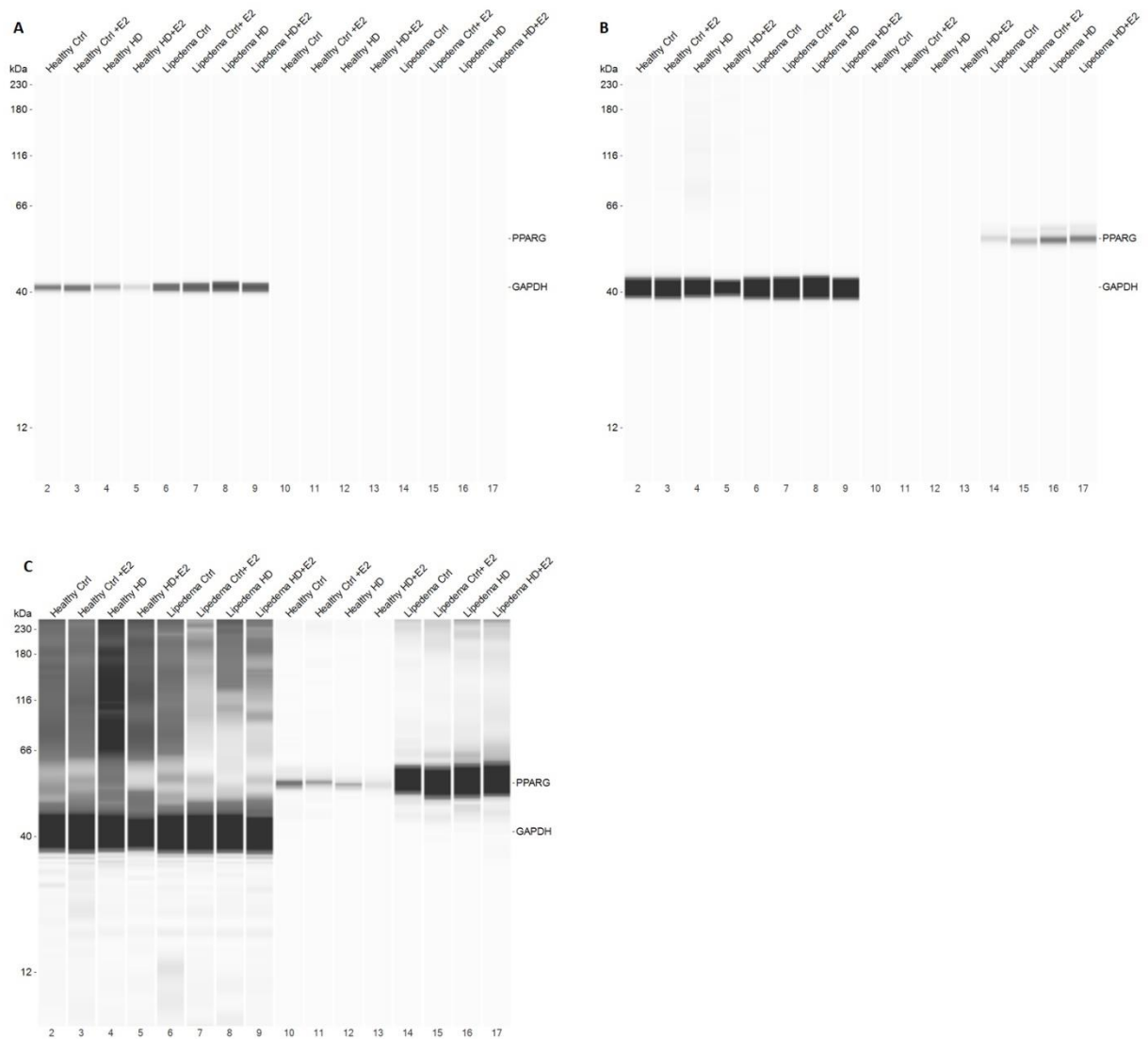


Figure S5. Western Blot showing the expression of GAPDH (capillaries 2-9), and total PPAR γ (capillaries 10-17) in adipogenic differentiated spheroids. The samples were run on a 12-230 kDa capillary kit. A-C are different exposures of the same run

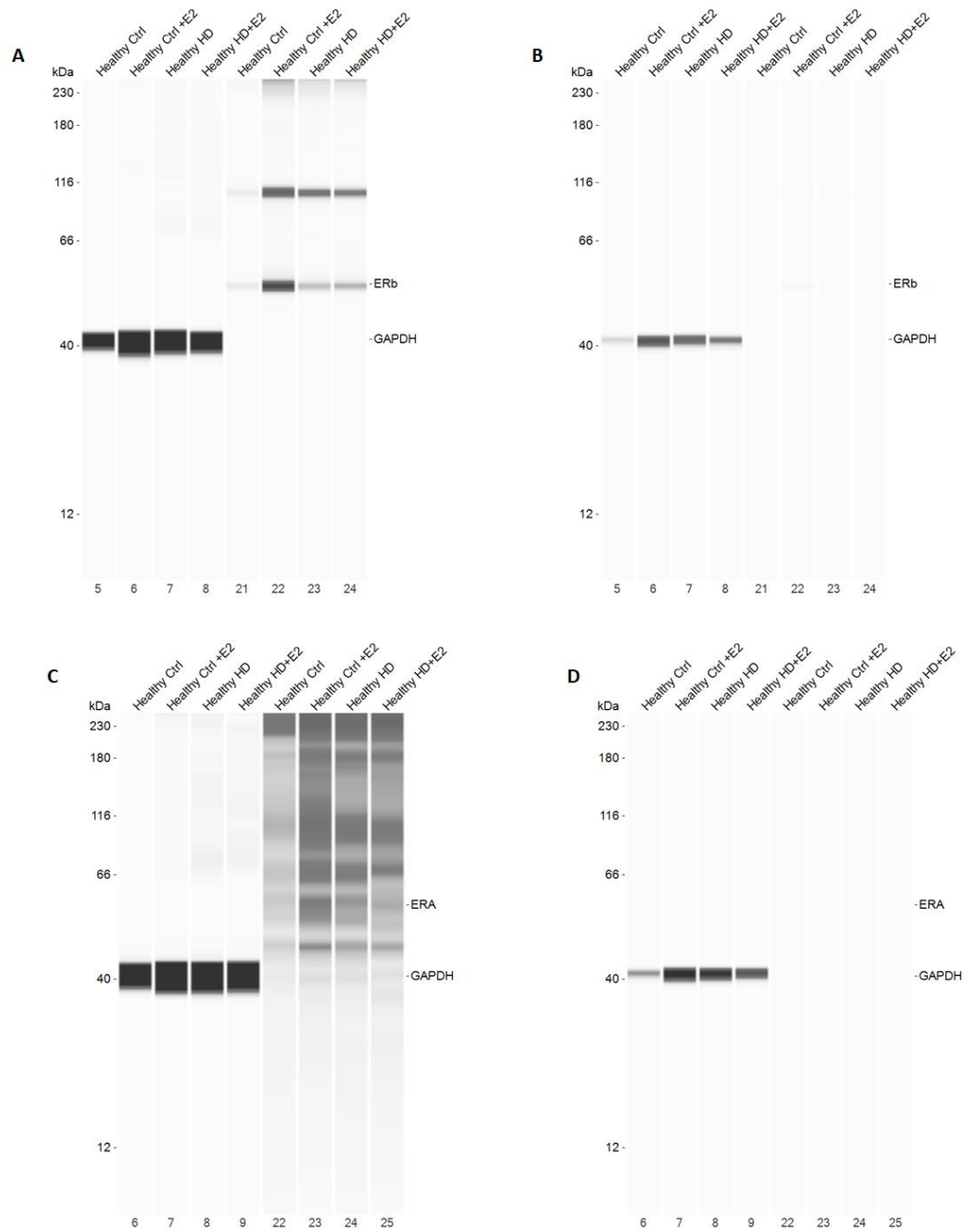


Figure S6. Western Blot showing the expression of (A, B) ER β and GAPDH and (C, D) ER α and GAPDH in adipogenic differentiated healthy spheroids. The samples were run on a 12-230 kDa capillary kit. A-B, C-D are different exposures of the same run.

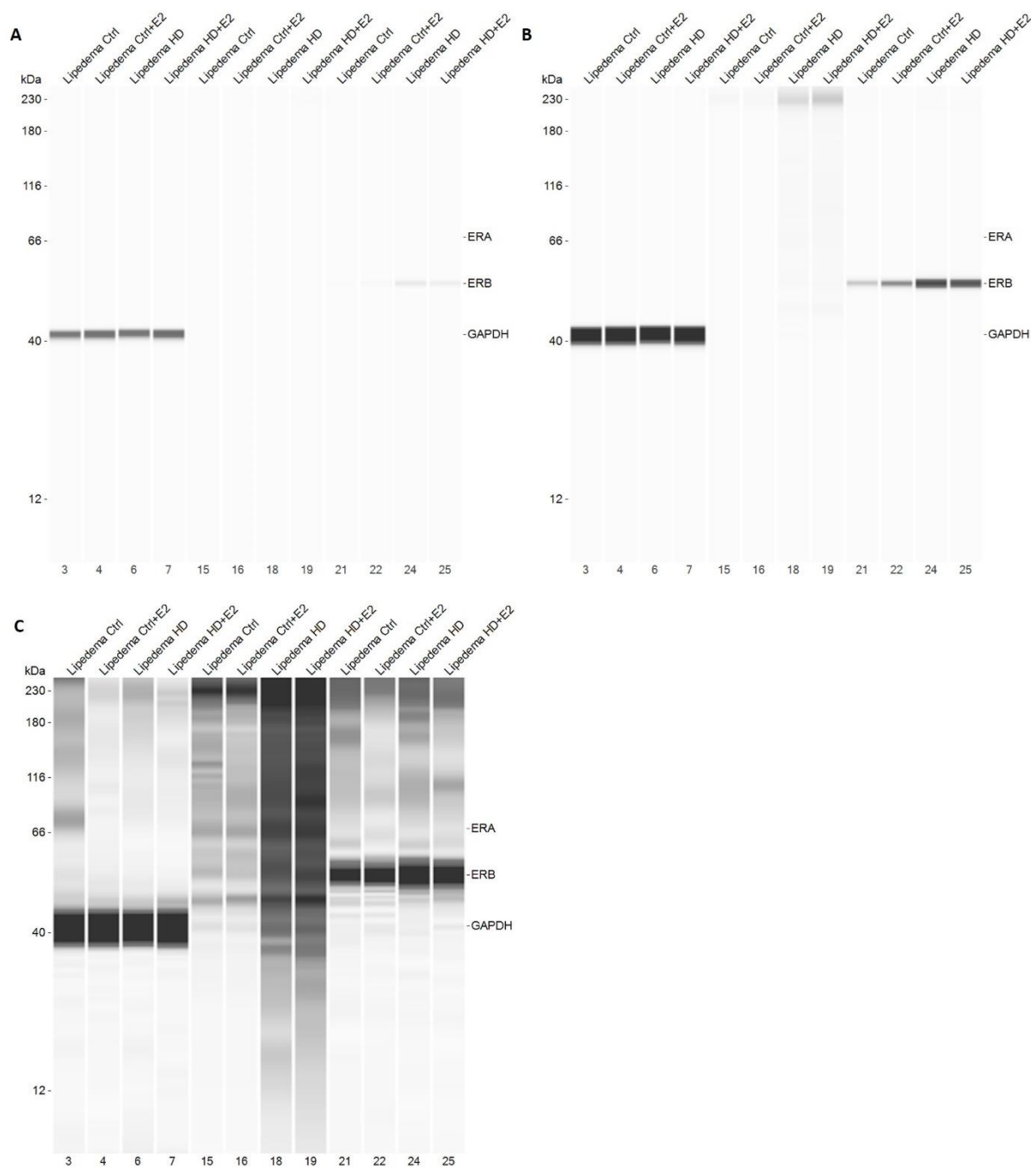


Figure S7. Western Blot showing the expression of GAPDH, ER α and ER β in adipogenic differentiated lipedema spheroids. The samples were run on a 12-230 kDa capillary kit. A-C are different exposures of the same run.

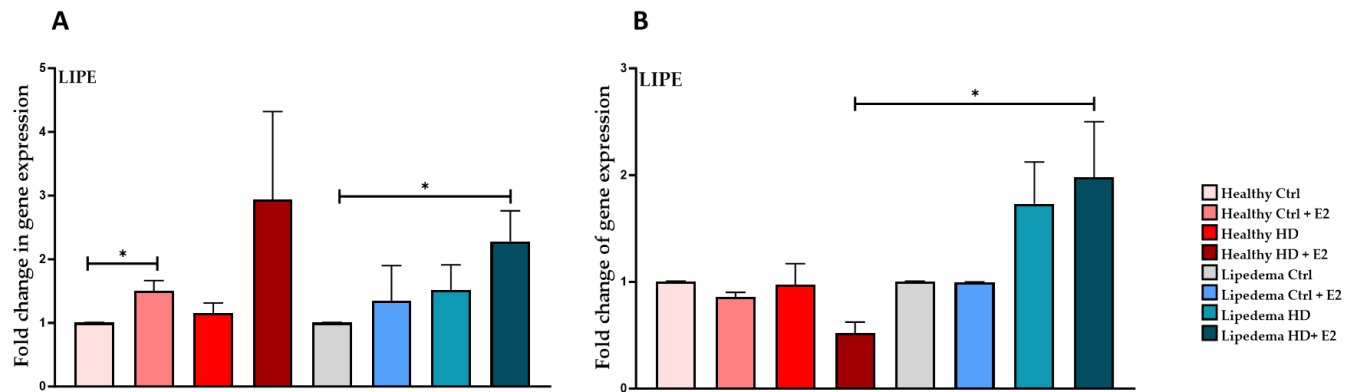


Figure S8. RT-PCR showed increased expression of LIPE in E2-HD lipedema treated (A) adipocytes in 2D culture and (B) differentiated spheroids compared to untreated control cells (n=3, *p<0.05).