

Supplementary Information

Sensitivity of hematopoietic stem cells to mitochondrial dysfunction by *SdhD* gene deletion

José Antonio Bejarano-García¹, África Millán-Uclés¹, Iván V. Rosado¹, L. Ignacio Sánchez-Abarca¹, Teresa Caballero-Velázquez^{1, 2}, María J. Durán-Galván¹, José A. Pérez-Simón^{*1, 2}, and José I. Piruat^{*1, 2}

¹ Instituto de Biomedicina de Sevilla (IBiS), Hospital Universitario Virgen del Rocío, CSIC, Universidad de Sevilla, Seville, Spain

² Departamento de Hematología. Hospital Universitario Virgen del Rocío. Seville, Spain

Running title: Hematopoiesis dependency on mitochondria

*Corresponding authors:

Dr. José I. Piruat / Dr. José A. Pérez-Simón
Instituto de Biomedicina de Sevilla (IBiS)
Campus Hospital Universitario Virgen del Rocío
Avenida Manuel Siurot s/n
41013 Seville, Spain
Phone +34 955 923088
jpiruat-ibis@us.es, josea.perez.simon.sspa@juntadeandalucia.es

The Supplementary Information of this manuscript contains three supplementary figures with their legends, and one supplementary table.

Figure Legends

Figure supplementary 1. Analysis of bone marrow CD45+ cells after 2 (T2) and 5 weeks (T5) after tamoxifen treatment. **(A)** Quantification of CD45⁺ leukocytes relative to the total number of events. Each symbol represents data from a single animal. **(B)** Percentage of Annexin V⁺ events in CD45⁺ population. N=7-17 per genotype. Bars represent the mean values \pm SEM. Statistical significance: *: $P\leq 0.05$; **: $P\leq 0.01$; ***: $P\leq 0.001$.

Figure supplementary 2. Hematimetric analysis of circulating cells in blood of *SdhD*^{flox/+} (+/+) , *SdhD*^{flox/-} (+/-), and *SdhD*^{flox/-} CRE (SDHD-ESR) individuals after tamoxifen treatment. N=8-16 per genotype and group. Plots represent the median values in the interquartile range \pm standard deviation. Statistical significance: ***: $P\leq 0.001$.

Figure supplementary 3. Quantification of T-cells subpopulations in thymi of SDHD-ESR mice according to the expression of CD4 and CD8 markers. Values are relative to the total number of events analyzed by flow cytometry.