Co-transfection of murine NXPE2 and murine glycophorin A confers reactivity with Ter-119

Authors

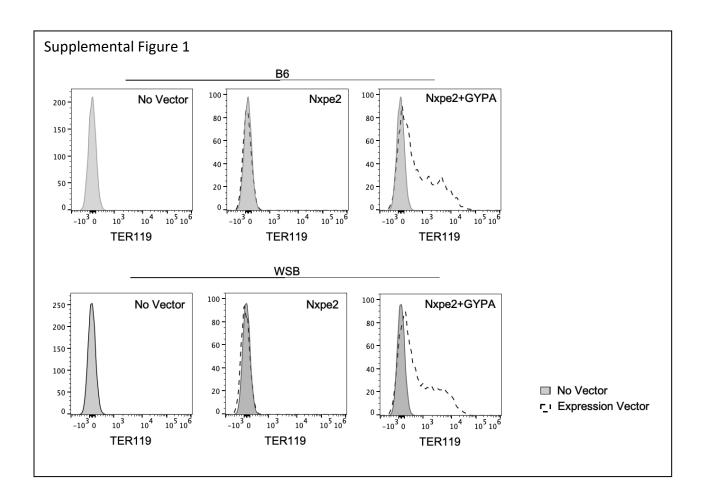
Gregory R. Keele,^{1,2} Ariel M. Hay,^{3,4} Nadia K. Holness,^{3,4} Arijita Jash,^{3,4} Sarah E. Ewald,^{3,4} Callan O'Connor,¹ Matthew Vincent,¹ Monika Dzieciatkowska,⁵ Angelo D'Alessandro,^{5,6} Gary A. Churchill¹ and James C. Zimring^{3,4}

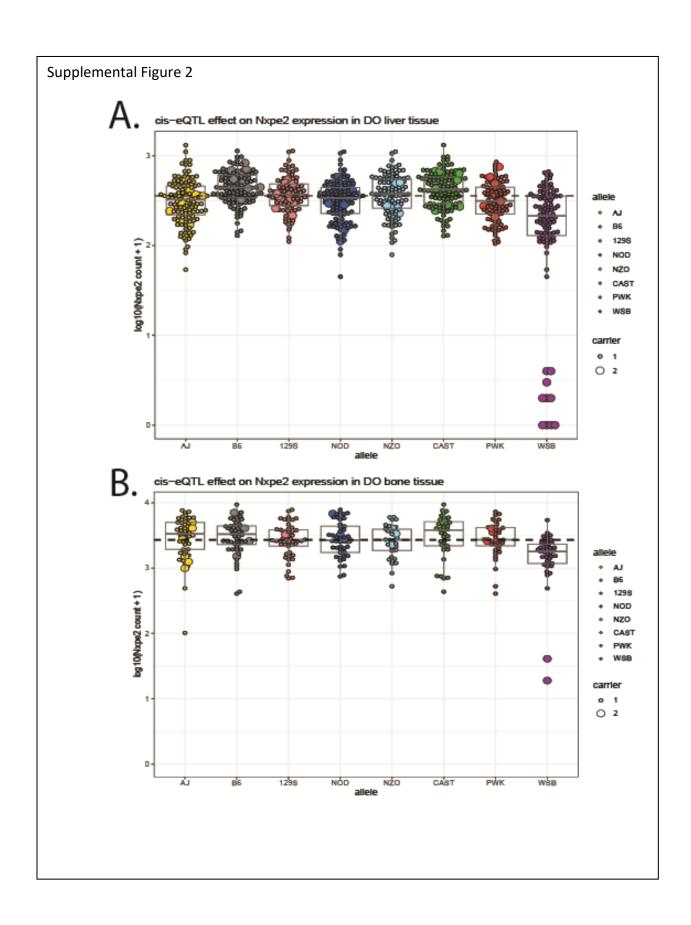
¹The Jackson Laboratory, Bar Harbor, ME; ²RTI International, Research Triangle Park, NC; ³University of Virginia School of Medicine, Charlottesville, VA; ⁴Carter Immunology Center, University of Virginia, Charlottesville, VA; ⁵Department of Biochemistry and Molecular Genetics, University of Colorado Anschutz Medical Campus, Aurora, CO and ⁶Omix Technologies Inc., Aurora, CO, USA

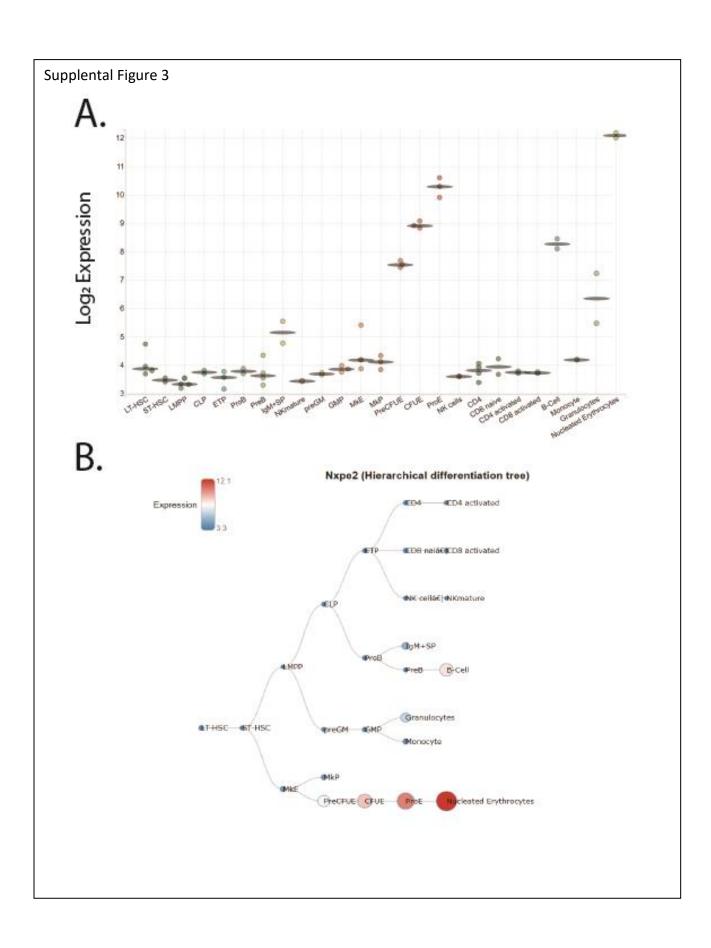
Correspondence:

J.C. ZIMRING - jcz2k@virginia.edu

https://doi.org/10.3324/haematol.2024.285168







Supplemental Figure Legends:

Supplemental Figure 1:NXPE2 has the same properties regardless of the amino acid variations found in B6 and WSB mice. HEK cells were transfected, as described in the main text, and then stained with TER-119 and analyzed by flow cytometry. Transfection conditions consisted of expression vectors encoding either the B6 or WSB variants of NXPE2 (alone or in combination with mGPA). Both B6 and WSB NXPE2 variants conferred TER-119 reactivity when co-transfected with mGPA but not on their own. There is no amino acid variation in mGPA between B6 and WSB strains.

Supplemental Figure 2: Cis-eQTL effect on NXPE2 expression in DO liver **(A)** and bone **(B)** tissues. WSB is shown in purple. Small circles and large circles indicate DO mice heterozygous or homozygous, respectively, for the WSB allele in the identified QTL on chromosome 9

Supplemental Figure 3: NXPE2 mRNA is selectively expressed in the erythroid lineage in mouse bone marrow. **(A)** Log expression of NXPE2 mRNA is shown from the indicated blood lineages based upon curated data from the bloodspot database. **(B)** Lineage specific graphical heat map of the same data as shown in panel A. Both images were generated using the publicly available Bloodspot Database.