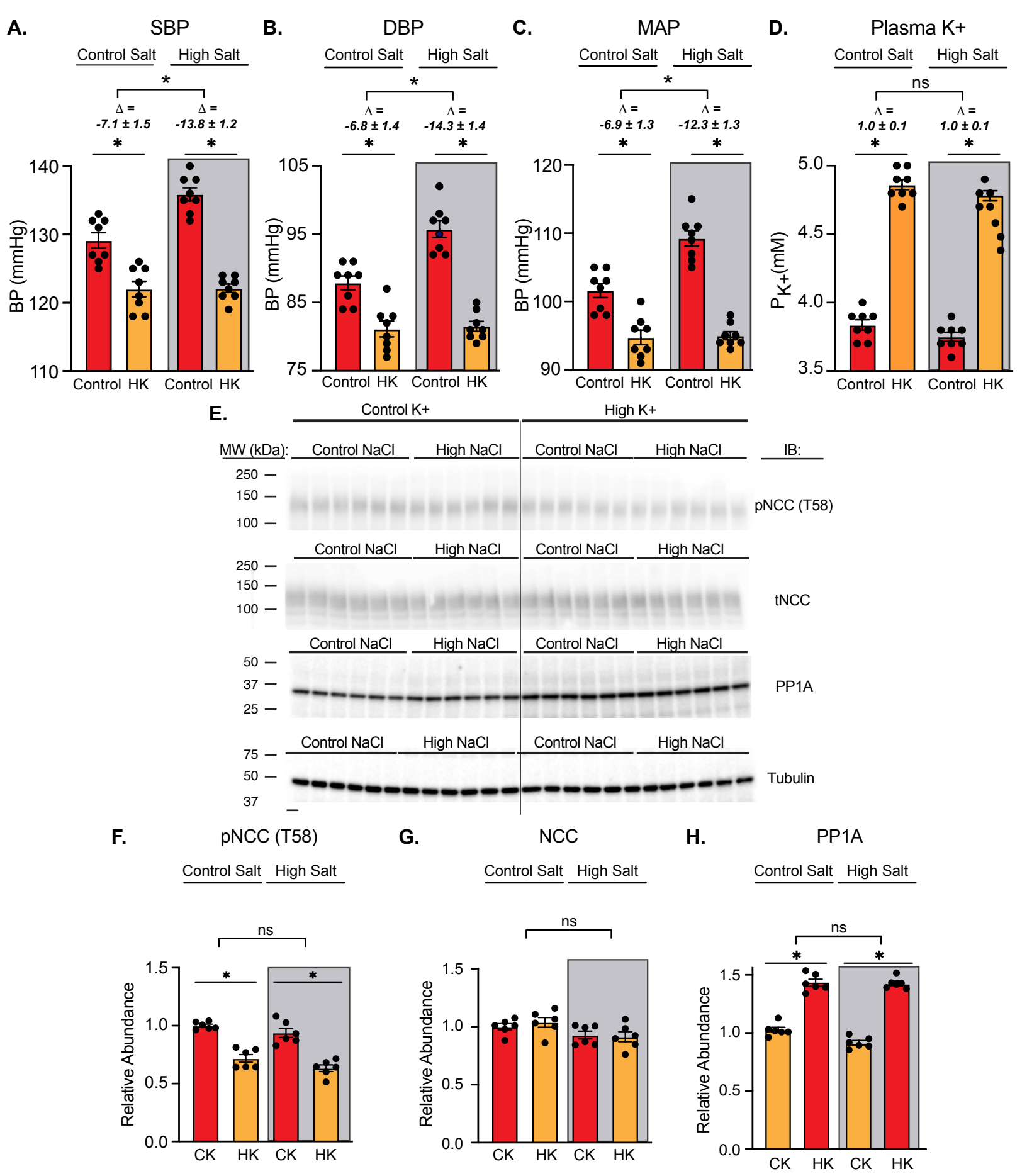


Supplemental Figure 1. High dietary potassium (HK) induces PP1A and reduces NCC phosphorylation and BP on high dietary salt background.
A. Systolic Blood Pressure (SBP), B. Diastolic Blood Pressure (DBP), C. Mean Arterial Blood Pressure (MAP) were measured in a cohort of mice (N=6 ): 1) on control diet and control potassium (CK), and then in response to high potassium diet (HK). After high potassium washout (4 days), BP was measured on high salt diet (2%, 10d, High Salt, CK), and the high potassium response was measured after 3 days on the high sodium diet. BP and potassium induced changes in BP are compared, * P <0.05, Repeated Measure One Way AVOVA, Tukey's.
D. plasma potassium (K+), F. Phospho-NCC (T58), G. total NCC, and H. PP1A protein abudnace.E. Immunoblot of F, G, H. * at least p<0.05, N= 6

**Supplemental Table 1**

| Genotype | WT/WT Mice | | | | CA/CA Mice | | | |
|---|---|---|---|---|---|---|---|---|
| | Control Diet (n=7) | | High K+ Diet (n=7) | | Control Diet (n=7) | | High K+ Diet (n=7) | |
| Gene | Norm Ave | SEM | Norm Ave | SEM | Norm Ave | SEM | Norm Ave | SEM |
| *Ppm1a* | 1.000 | 0.015 | 0.988 | 0.021 | 1.009 | 0.017 | 1.028 | 0.025 |
| *Ppm1b* | 1.000 | 0.016 | 0.991 | 0.014 | 0.969 | 0.019 | 0.992 | 0.016 |
| *Ppm1d* | 1.000 | 0.015 | 1.046 | 0.020 | 1.004 | 0.011 | 1.013 | 0.015 |
| *Ppm1e* | 1.000 | 0.013 | 1.016 | 0.025 | 1.000 | 0.011 | 0.996 | 0.009 |
| *Ppm1f* | 1.000 | 0.011 | 1.008 | 0.025 | 1.016 | 0.016 | 1.007 | 0.010 |
| *Ppm1g* | 1.000 | 0.016 | 0.962 | 0.018 | 0.970 | 0.019 | 0.972 | 0.012 |
| *Ppm1h* | 1.000 | 0.025 | 0.983 | 0.011 | 0.986 | 0.020 | 0.981 | 0.010 |
| *Ppm1j* | 1.000 | 0.023 | 0.953 | 0.027 | 0.991 | 0.017 | 0.977 | 0.009 |
| *Ppm1k* | 1.000 | 0.015 | 0.990 | 0.016 | 1.004 | 0.019 | 1.004 | 0.015 |
| *Ppm1l* | 1.000 | 0.013 | 0.995 | 0.011 | 0.986 | 0.017 | 0.990 | 0.012 |
| *Ppm1m* | 1.000 | 0.013 | 0.999 | 0.023 | 0.985 | 0.008 | 0.991 | 0.014 |
| Ppm1n | 1.000 | 0.029 | 1.031 | 0.016 | 0.997 | 0.016 | 1.001 | 0.012 |
| *Ppme1* | 1.000 | 0.024 | 1.003 | 0.018 | 0.994 | 0.021 | 0.996 | 0.012 |
| *Ppp1ca* | 1.000 | 0.005 | 1.459* | 0.050 | 1.773* | 0.017 | 1.804* | 0.014 |
| *Ppp1cb* | 1.000 | 0.011 | 1.010 | 0.016 | 0.989 | 0.010 | 1.026 | 0.016 |
| *Ppp1cc* | 1.000 | 0.013 | 1.009 | 0.011 | 1.002 | 0.021 | 0.998 | 0.015 |
| *Ppp1r1a* | 1.000 | 0.010 | 1.001 | 0.007 | 0.863* | 0.015 | 0.724* | 0.018 |
| *Ppp1r1b* | 1.000 | 0.016 | 1.019 | 0.018 | 1.007 | 0.017 | 1.013 | 0.012 |
| *Ppp1r2* | 1.000 | 0.013 | 0.989 | 0.026 | 1.010 | 0.014 | 1.019 | 0.013 |
| *Ppp1r3a* | 1.000 | 0.029 | 1.004 | 0.015 | 0.982 | 0.011 | 0.998 | 0.015 |
| *Ppp1r3b* | 1.000 | 0.025 | 1.024 | 0.024 | 1.008 | 0.021 | 1.001 | 0.012 |
| *Ppp1r3c* | 1.000 | 0.027 | 0.947 | 0.012 | 1.008 | 0.015 | 1.020 | 0.016 |
| *Ppp1r3d* | 1.000 | 0.023 | 0.957 | 0.025 | 0.962 | 0.007 | 0.953 | 0.011 |
| *Ppp1r3e* | 1.000 | 0.016 | 1.028 | 0.023 | 1.028 | 0.019 | 1.021 | 0.020 |
| *Ppp1r7* | 1.000 | 0.013 | 0.950 | 0.027 | 0.914* | 0.010 | 0.854* | 0.022 |
| *Ppp1r8* | 1.000 | 0.028 | 0.995 | 0.018 | 0.979 | 0.022 | 0.995 | 0.017 |
| *Ppp1r9a* | 1.000 | 0.021 | 1.027 | 0.019 | 1.025 | 0.025 | 1.005 | 0.018 |
| *Ppp1r9b* | 1.000 | 0.025 | 1.016 | 0.014 | 0.978 | 0.019 | 0.998 | 0.017 |
| *Ppp1r10* | 1.000 | 0.013 | 0.986 | 0.012 | 1.060 | 0.025 | 1.103* | 0.008 |
| *Ppp1r11* | 1.000 | 0.022 | 0.973 | 0.023 | 0.989 | 0.010 | 0.996 | 0.012 |
| *Ppp1r12a* | 1.000 | 0.018 | 1.020 | 0.018 | 0.998 | 0.023 | 0.991 | 0.013 |
| *Ppp1r12b* | 1.000 | 0.028 | 0.965 | 0.017 | 1.049 | 0.022 | 1.028 | 0.010 |
| *Ppp1r12c* | 1.000 | 0.015 | 1.001 | 0.029 | 1.030 | 0.018 | 1.010 | 0.011 |
| *Ppp1r13b* | 1.000 | 0.010 | 0.999 | 0.027 | 0.994 | 0.011 | 1.018 | 0.020 |
| *Ppp1r14a* | 1.000 | 0.021 | 1.019 | 0.019 | 1.008 | 0.022 | 1.006 | 0.015 |
| *Ppp1r14b* | 1.000 | 0.026 | 0.986 | 0.023 | 0.974 | 0.015 | 0.998 | 0.013 |
| *Ppp1r14c* | 1.000 | 0.024 | 1.054 | 0.024 | 1.027 | 0.011 | 1.016 | 0.013 |
| *Ppp1r14d* | 1.000 | 0.023 | 1.009 | 0.026 | 0.971 | 0.024 | 0.995 | 0.012 |
| *Ppp1r15a* | 1.000 | 0.016 | 0.988 | 0.026 | 0.994 | 0.012 | 1.017 | 0.017 |
| *Ppp1r15b* | 1.000 | 0.021 | 1.004 | 0.024 | 0.993 | 0.027 | 1.007 | 0.010 |
| *Ppp1r16a* | 1.000 | 0.020 | 0.924* | 0.020 | 0.958 | 0.010 | 0.963 | 0.010 |
| *Ppp1r16b* | 1.000 | 0.018 | 0.981 | 0.025 | 0.992 | 0.010 | 0.993 | 0.010 |
| *Ppp1r17* | 1.000 | 0.011 | 0.974 | 0.011 | 0.974 | 0.016 | 0.997 | 0.013 |
| *Ppp1r18* | 1.000 | 0.017 | 0.991 | 0.028 | 0.999 | 0.010 | 0.993 | 0.017 |
| *Ppp1r21* | 1.000 | 0.020 | 1.022 | 0.010 | 1.000 | 0.026 | 1.010 | 0.012 |
| *Ppp1r27* | 1.000 | 0.008 | 1.014 | 0.026 | 0.997 | 0.027 | 1.004 | 0.012 |
| *Ppp1r32* | 1.000 | 0.015 | 0.984 | 0.011 | 0.979 | 0.015 | 1.037 | 0.020 |
| *Ppp1r35* | 1.000 | 0.024 | 0.973 | 0.021 | 1.015 | 0.027 | 1.012 | 0.018 |
| *Ppp1r36* | 1.000 | 0.013 | 0.993 | 0.022 | 1.007 | 0.017 | 1.005 | 0.013 |
| *Ppp1r37* | 1.000 | 0.023 | 0.988 | 0.010 | 0.965 | 0.027 | 0.986 | 0.009 |
| *Ppp1r42* | 1.000 | 0.027 | 0.953 | 0.025 | 0.986 | 0.010 | 1.002 | 0.015 |
| *Ppp2ca* | 1.000 | 0.030 | 0.987 | 0.037 | 1.032 | 0.040 | 1.035 | 0.033 |
| *Ppp2cb* | 1.000 | 0.024 | 0.953 | 0.010 | 0.963 | 0.007 | 1.013 | 0.012 |
| *Ppp2r1a* | 1.000 | 0.011 | 1.043 | 0.021 | 1.075* | 0.014 | 1.065* | 0.009 |
| *Ppp2r1b* | 1.000 | 0.024 | 1.054 | 0.021 | 1.017 | 0.025 | 1.015 | 0.009 |
| *Ppp2r2a* | 1.000 | 0.011 | 1.007 | 0.012 | 1.000 | 0.010 | 1.005 | 0.011 |
| *Ppp2r2b* | 1.000 | 0.026 | 1.000 | 0.014 | 0.994 | 0.015 | 1.006 | 0.014 |
| *Ppp2r2c* | 1.000 | 0.028 | 1.022 | 0.013 | 1.005 | 0.015 | 0.998 | 0.014 |
| *Ppp2r2d* | 1.000 | 0.023 | 1.012 | 0.028 | 1.025 | 0.011 | 1.022 | 0.010 |
| *Ppp2r3a* | 1.000 | 0.024 | 0.973 | 0.025 | 0.971 | 0.018 | 0.963 | 0.009 |
| *Ppp2r3c* | 1.000 | 0.022 | 1.001 | 0.020 | 0.990 | 0.011 | 1.002 | 0.012 |
| *Ppp2r4* | 1.000 | 0.020 | 1.031 | 0.019 | 1.028 | 0.014 | 1.026 | 0.013 |
| *Ppp2r5a* | 1.000 | 0.017 | 0.984 | 0.017 | 0.986 | 0.012 | 0.994 | 0.008 |
| *Ppp2r5c* | 1.000 | 0.013 | 1.025 | 0.023 | 1.006 | 0.009 | 1.009 | 0.009 |
| *Ppp2r5e* | 1.000 | 0.022 | 0.942 | 0.028 | 0.967 | 0.012 | 0.979 | 0.015 |
| *Ppp3ca* | 1.000 | 0.017 | 1.113* | 0.022 | 1.178* | 0.005 | 1.203* | 0.015 |
| *Ppp3cb* | 1.000 | 0.015 | 0.998 | 0.027 | 0.989 | 0.011 | 0.995 | 0.011 |
| *Ppp3cc* | 1.000 | 0.019 | 0.975 | 0.025 | 0.979 | 0.015 | 0.986 | 0.010 |
| *Ppp3r1* | 1.000 | 0.019 | 0.967 | 0.012 | 0.969 | 0.012 | 0.962 | 0.007 |
| *Ppp3r2* | 1.000 | 0.023 | 0.980 | 0.009 | 0.989 | 0.017 | 0.990 | 0.011 |
| *Ppp4c* | 1.000 | 0.025 | 1.000 | 0.018 | 1.027 | 0.013 | 1.006 | 0.014 |
| *Ppp4r1* | 1.000 | 0.011 | 0.984 | 0.025 | 1.000 | 0.014 | 1.001 | 0.014 |
| *Ppp4r2* | 1.000 | 0.014 | 1.015 | 0.026 | 0.978 | 0.009 | 0.990 | 0.010 |
| *Ppp4r4* | 1.000 | 0.014 | 0.983 | 0.026 | 0.988 | 0.010 | 0.986 | 0.012 |
| *Ppp5c* | 1.000 | 0.016 | 0.999 | 0.029 | 0.995 | 0.019 | 1.001 | 0.010 |
| *Ppp6c* | 1.000 | 0.025 | 1.035 | 0.020 | 1.026 | 0.016 | 1.008 | 0.015 |
| *Ppp6r1* | 1.000 | 0.020 | 0.979 | 0.023 | 0.968 | 0.017 | 0.994 | 0.014 |
| *Ppp6r2* | 1.000 | 0.012 | 1.016 | 0.022 | 0.999 | 0.010 | 0.988 | 0.015 |
| *Ppp6r3* | 1.000 | 0.024 | 1.001 | 0.017 | 0.988 | 0.017 | 0.992 | 0.018 |

# Supplemental Acknowledgments

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