

SUPPLEMENTARY DATA

Mouse ZIP8 and ZIP14 Divalent Cation/Bicarbonate Symporters: Tissue-Specific Innate Response to Inflammatory Stimuli

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Table S1. Effect of LPS, TNF or IL6 on mRNA levels as a function of time**Part A: P-values from Figs. 1A & 2A data (LPS treatment)**

Hours	2	4	8	16	32		2	4	8	16	32		2	4	8	16	32
Liver						PSI						Kidney					
ZIP8	NS	NS	NS	0.004	NS	ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	NS
ZIP14A	NS	NS	NS	<0.001	0.049	ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14B	NS	NS	NS	0.019	NS	ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	NS	NS	NS	NS	NS	TNF	0.007	0.016	0.010	0.009	0.008	TNF	NS	NS	NS	NS	NS
IL6	NS	NS	NS	NS	NS	IL6	0.005	0.019	NS	0.032	0.050	IL6	0.002	0.034	NS	NS	NS
IL1B	NS	NS	NS	NS	NS	IL1B	0.017	0.035	NS	NS	0.026	IL1B	NS	NS	NS	NS	NS
Lung						Heart						Brain					
ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	0.013	ZIP8	NS	0.016	NS	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	0.027	NS	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14B	NS	NS	NS	0.010	NS	ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	<0.001	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS	TNF	0.008	0.007	0.013	0.018	0.028
IL6	<0.001	<0.001	NS	NS	NS	IL6	0.002	0.002	NS	NS	NS	IL6	<0.001	NS	NS	NS	NS
IL1B	0.005	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS	IL1B	0.011	0.013	0.034	NS	NS
Pancreas						Spleen						Testis					
ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	0.028	NS	ZIP8	NS	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	0.049	NS	NS	<0.001	ZIP14A	NS	NS	NS	NS	0.022
ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	0.015	0.046	0.024	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	NS	NS	NS	NS	NS	TNF	0.004	0.007	NS	NS	NS	TNF	0.003	0.002	NS	NS	NS
IL6	NS	NS	NS	NS	0.030	IL6	<0.001	<0.001	0.026	0.035	NS	IL6	0.003	0.009	0.032	0.041	NS
IL1B	NS	NS	NS	NS	0.028	IL1B	0.029	0.014	NS	NS	NS	IL1B	0.007	NS	NS	NS	NS
Bladder						Skin						PGD					
ZIP8	0.001	NS	NS	0.002	NS	ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	NS
ZIP14A	0.022	0.028	NS	0.022	NS	ZIP14A	NS	0.003	0.004	0.019	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	NS	NS	NS	NS	ZIP14B	0.029	0.011	0.022	0.030	NS
TNF	0.004	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS	TNF	0.022	NS	NS	NS	NS
IL6	<0.001	0.004	0.005	NS	NS	IL6	0.039	0.018	NS	NS	NS	IL6	<0.001	NS	NS	NS	<0.001
IL1B	0.002	0.010	0.034	0.045	NS	IL1B	NS	NS	NS	NS	NS	IL1B	0.011	NS	NS	NS	NS

Part B: P-values from Figs. 1B & 2B data (TNF treatment)

Hours	2	4	8	16	32		2	4	8	16	32		2	4	8	16	32
Liver						PSI						Kidney					
						ZIP8	NS	NS	NS	NS	NS	ZIP8	0.017	0.015	0.042	NS	NS
ZIP8	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	0.002	NS	NS	NS
ZIP14B	NS	NS	NS	NS	NS	TNF	NS	0.024	NS	0.015	NS	TNF	NS	NS	0.018	NS	NS
TNF	NS	0.032	NS	NS	NS	IL6	0.004	0.007	NS	NS	NS	IL6	NS	0.015	NS	NS	NS
IL6	0.018	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS
IL1B	NS	NS	NS	NS	NS		IL1B	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS
Lung						Heart						Brain					
ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	0.008	0.001	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	0.034	NS	NS
ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	NS	0.039	0.004	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	NS	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS
IL6	0.015	NS	NS	NS	0.012	IL6	NS	NS	0.011	NS	NS	IL6	NS	NS	NS	NS	NS
IL1B	NS	NS	NS	NS	0.004	IL1B	NS	NS	NS	NS	NS	IL1B	NS	NS	0.006	NS	NS
Pancreas						Spleen						Testis					
ZIP8	NS	0.020	0.002	0.009	NS	ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14B	NS	NS	NS	0.017	NS	ZIP14B	NS	NS	NS	NS	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	NS	NS	0.031	0.028	NS	TNF	NS	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS
IL6	NS	NS	0.020	0.013	NS	IL6	0.036	0.041	NS	NS	NS	IL6	NS	NS	NS	NS	NS
IL1B	0.008	NS	0.007	0.012	NS	IL1B	NS	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS
Bladder						Skin						PGD					
ZIP8	NS	NS	NS	NS	NS	ZIP8	NS	NS	NS	NS	NS	ZIP8	0.011	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS	NS	ZIP14A	0.002	0.033	0.042	NS	NS	ZIP14A	NS	NS	NS	NS	NS
ZIP14B	NS	NS	NS	NS	NS	ZIP14B	0.003	0.019	0.018	NS	NS	ZIP14B	NS	NS	NS	NS	NS
TNF	NS	NS	NS	NS	NS	TNF	NS	NS	NS	NS	NS	TNF	NS	0.004	0.002	NS	NS
IL6	0.031	NS	NS	NS	NS	IL6	0.030	NS	NS	NS	NS	IL6	NS	<0.001	0.001	NS	NS
IL1B	0.039	NS	NS	NS	NS	IL1B	0.014	NS	NS	NS	NS	IL1B	NS	NS	NS	NS	NS

Part C: P-values from Figs. 1C & 2C data (IL6 treatment)

Hours	2	4	8	16			2	4	8	16			2	4	8	16	
Liver										PSI		Kidney					
ZIP8	NS	NS	0.011	NS			ZIP8	NS	NS	NS	NS		ZIP8	NS	NS	NS	NS
ZIP14A	NS	NS	NS	0.040			ZIP14A	NS	NS	NS	NS		ZIP14A	NS	NS	NS	NS
ZIP14B	NS	NS	NS	0.003			ZIP14B	NS	NS	NS	NS		ZIP14B	NS	NS	NS	NS
TNF	NS	NS	NS	NS			TNF	NS	NS	NS	NS		TNF	NS	NS	NS	NS
IL6	NS	NS	NS	NS			IL6	0.025	NS	NS	NS		IL6	0.010	0.008	0.025	0.015
IL1B	NS	NS	0.042	NS			IL1B	NS	NS	0.013	NS		IL1B	0.014	0.019	0.019	0.028
Lung										Heart		Brain					
ZIP8	NS	NS	0.028	0.040			ZIP8	NS	NS	NS	NS		ZIP8	NS	0.027	0.028	NS
ZIP14A	NS	NS	NS	0.012			ZIP14A	NS	NS	NS	0.048		ZIP14A	NS	NS	NS	NS
ZIP14B	NS	NS	NS	NS			ZIP14B	NS	NS	NS	0.038		ZIP14B	NS	NS	NS	NS
TNF	NS	NS	NS	NS			TNF	NS	NS	NS	NS		TNF	NS	NS	NS	NS
IL6	NS	NS	NS	NS			IL6	NS	NS	NS	NS		IL6	NS	NS	NS	NS
IL1B	NS	NS	0.005	NS			IL1B	0.011	NS	NS	0.020		IL1B	NS	NS	NS	NS
Pancreas										Spleen		Testis					
ZIP8	NS	NS	NS	NS			ZIP8	NS	NS	NS	NS		ZIP8	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS			ZIP14A	NS	NS	NS	NS		ZIP14A	NS	NS	NS	NS
ZIP14B	NS	NS	NS	NS			ZIP14B	NS	NS	NS	NS		ZIP14B	NS	0.008	NS	NS
TNF	NS	NS	NS	NS			TNF	NS	NS	NS	NS		TNF	NS	NS	NS	NS
IL6	NS	NS	NS	NS			IL6	NS	NS	NS	NS		IL6	NS	NS	NS	NS
IL1B	0.009	0.016	0.015	NS			IL1B	NS	NS	NS	NS		IL1B	NS	NS	NS	NS
Bladder										Skin		PGD					
ZIP8	NS	NS	0.006	NS			ZIP8	NS	NS	NS	NS		ZIP8	NS	NS	NS	NS
ZIP14A	NS	NS	NS	NS			ZIP14A	NS	NS	NS	NS		ZIP14A	NS	NS	NS	NS
ZIP14B	NS	NS	0.050	NS			ZIP14B	NS	NS	NS	NS		ZIP14B	NS	NS	NS	NS
TNF	NS	NS	NS	NS			TNF	NS	NS	NS	NS		TNF	NS	NS	NS	NS
IL6	NS	NS	NS	NS			IL6	NS	0.044	NS	NS		IL6	NS	NS	NS	NS
IL1B	0.016	NS	NS	NS			IL1B	NS	NS	NS	NS		IL1B	NS	NS	NS	NS