

Supplementary Materials: Microglial Expression of Hdac1 and Hdac2 is Dispensable for Experimental Autoimmune Encephalomyelitis (EAE) Progression

Moumita Datta, Stefanie M. Hansen and Ori Staszewski

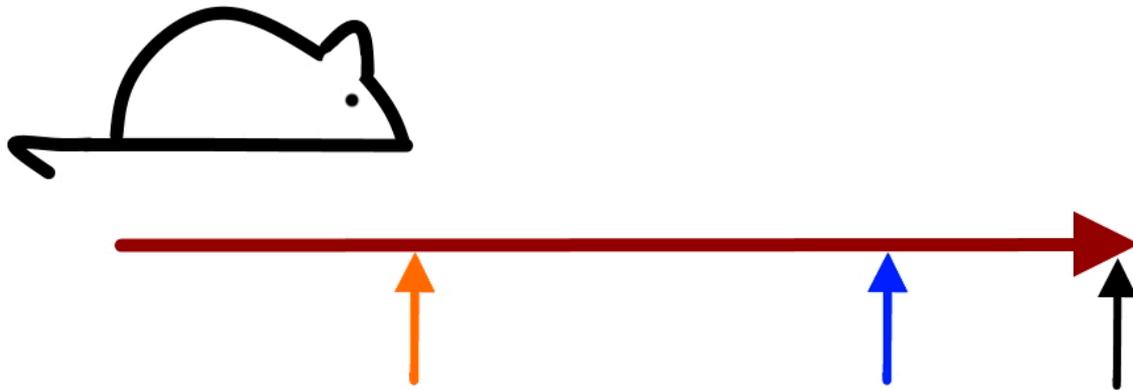


Figure S1. Timeline of experiments. Orange arrow: at age of 6 weeks of tamoxifen treatment. Blue arrow: at age of 14 weeks EAE induction. Black arrow: 30 days after EAE induction, end of observation; animals sacrificed.

Tables S1–S8: Detailed results of statistical analysis for data shown in Figures 1 and 3.

Table S1

Table Analyzed	Percent_Myelination			
One-way analysis of variance				
P value	0,8834			
P value summary	ns			
Are means signif. different? (P < 0.05)	No			
Number of groups	4			
F	0,2171			
R square	0,03154			
Bartlett's test for equal variances				
Bartlett's statistic (corrected)	1,327			
P value	0,7228			
P value summary	ns			
Do the variances differ signif. (P < 0.05)	No			
ANOVA Table	SS	df	MS	
Treatment (between columns)	10,59	3	3,530	
Residual (within columns)	325,1	20	16,26	
Total	335,7	23		
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	6	6	6	6
Minimum	75,49	71,24	72,57	70,88
25% Percentile	76,62	74,53	75,85	73,45
Median	79,72	78,17	79,77	79,04
75% Percentile	81,68	81,53	82,32	82,19
Maximum	83,13	82,68	84,37	83,60

Mean	79,38	77,84	79,18	78,10
Std. Deviation	2,782	4,237	4,067	4,774
Std. Error	1,136	1,730	1,660	1,949
Lower 95% CI	76,46	73,39	74,91	73,09
Upper 95% CI	82,29	82,29	83,44	83,11

Table S2

Table Analyzed	Mac3_CellNumbers			
One-way analysis of variance				
P value	0,8908			
P value summary	ns			
Are means signif. different? (P < 0.05)	No			
Number of groups	4			
F	0,2064			
R square	0,03002			
Bartlett's test for equal variances				
Bartlett's statistic (corrected)	0,2017			
P value	0,9773			
P value summary	ns			
Do the variances differ signif. (P < 0.05)	No			
ANOVA Table				
	SS	df	MS	
Treatment (between columns)	154,0	3	51,32	
Residual (within columns)	4974	20	248,7	
Total	5128	23		
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	6	6	6	6
Minimum	40,13	47,85	43,45	35,64
25% Percentile	48,03	50,52	48,93	54,06
Median	56,15	59,24	62,38	66,84
75% Percentile	71,28	73,12	77,35	81,55
Maximum	81,55	90,30	86,41	85,00
Mean	58,75	62,57	63,28	65,82
Std. Deviation	14,35	15,41	15,56	17,59
Std. Error	5,859	6,293	6,351	7,180
Lower 95% CI	43,69	46,39	46,96	47,36
Upper 95% CI	73,81	78,75	79,61	84,27

Table S3

Table Analyzed	CD3_CellNumbers		
One-way analysis of variance			
P value	0,9747		
P value summary	ns		
Are means signif. different? (P < 0.05)	No		
Number of groups	4		
F	0,07117		
R square	0,01056		
Bartlett's test for equal variances			
Bartlett's statistic (corrected)	0,5373		
P value	0,9106		
P value summary	ns		
Do the variances differ signif. (P < 0.05)	No		
ANOVA Table			
	SS	df	MS
Treatment (between columns)	11,11	3	3,703

Residual (within columns)	1040	20	52,02	
Total	1052	23		
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	6	6	6	6
Minimum	10,45	5,900	12,44	8,960
25% Percentile	14,46	12,57	13,45	11,80
Median	19,82	20,01	19,88	18,76
75% Percentile	24,09	23,60	26,56	26,90
Maximum	26,74	28,58	31,83	30,30
Mean	19,30	18,54	20,43	19,21
Std. Deviation	5,785	7,626	7,196	8,043
Std. Error	2,362	3,113	2,938	3,283
Lower 95% CI	13,23	10,54	12,88	10,77
Upper 95% CI	25,37	26,54	27,99	27,65

Table S4

Table Analyzed	B220_CellNumbers			
One-way analysis of variance				
P value	0,9086			
P value summary	ns			
Are means signif. different? (P < 0.05)	No			
Number of groups	4			
F	0,1802			
R square	0,02631			
Bartlett's test for equal variances				
Bartlett's statistic (corrected)	0,8500			
P value	0,8375			
P value summary	ns			
Do the variances differ signif. (P < 0.05)	No			
ANOVA Table	SS	df	MS	
Treatment (between columns)	14,84	3	4,947	
Residual (within columns)	549,2	20	27,46	
Total	564,0	23		
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	6	6	6	6
Minimum	2,980	2,370	1,180	6,000
25% Percentile	3,430	5,835	6,003	7,680
Median	8,770	9,035	9,810	9,670
75% Percentile	12,30	12,49	15,05	12,37
Maximum	15,43	18,74	20,38	18,36
Mean	8,465	9,430	10,34	10,39
Std. Deviation	4,778	5,365	6,357	4,219
Std. Error	1,951	2,190	2,595	1,723
Lower 95% CI	3,451	3,800	3,672	5,957
Upper 95% CI	13,48	15,06	17,01	14,81

Table S5

Table Analyzed	Maximal Score
Kruskal-Wallis test	
P value	0,1651

Exact or approximate P value?	Gaussian Approximation			
P value summary	ns			
Do the medians vary signif. (P < 0.05)	No			
Number of groups	4			
Kruskal-Wallis statistic	5,093			
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	25	15	14	14
Minimum	1,000	1,000	1,500	2,000
25% Percentile	2,000	2,000	2,500	2,875
Median	3,000	3,500	2,750	3,500
75% Percentile	3,500	3,500	3,500	3,500
Maximum	3,500	3,500	3,500	3,500
Mean	2,700	2,833	2,821	3,214
Std. Deviation	0,8036	0,9194	0,5754	0,5082
Std. Error	0,1607	0,2374	0,1538	0,1358
Lower 95% CI	2,368	2,324	2,489	2,921
Upper 95% CI	3,032	3,342	3,154	3,508

Table S6

Table Analyzed	Cummulative Score			
Kruskal-Wallis test				
P value	0,0757			
Exact or approximate P value?	Gaussian Approximation			
P value summary	ns			
Do the medians vary signif. (P < 0.05)	No			
Number of groups	4			
Kruskal-Wallis statistic	6,884			
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	25	15	14	14
Minimum	2,000	8,500	9,000	3,000
25% Percentile	18,50	17,50	19,88	27,25
Median	26,50	32,00	20,25	43,50
75% Percentile	43,25	41,00	31,13	46,00
Maximum	55,00	64,50	47,50	48,50
Mean	29,60	31,93	24,25	36,89
Std. Deviation	15,09	18,21	9,807	13,03
Std. Error	3,017	4,703	2,621	3,482
Lower 95% CI	23,37	21,85	18,59	29,37
Upper 95% CI	35,83	42,02	29,91	44,42

Table S7

Table Analyzed	AUC			
Kruskal-Wallis test				
P value	0,1107			
Exact or approximate P value?	Gaussian Approximation			
P value summary	ns			
Do the medians vary signif. (P < 0.05)	No			
Number of groups	4			
Kruskal-Wallis statistic	6,019			
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	25	15	14	14
Minimum	1,500	8,500	7,750	2,000

25% Percentile	16,25	16,75	17,13	24,56
Median	23,75	26,79	20,57	35,63
75% Percentile	35,25	39,78	32,47	45,00
Maximum	53,00	58,25	45,75	49,25
Mean	25,90	29,97	22,83	33,38
Std. Deviation	13,65	15,92	11,37	13,50
Std. Error	2,729	4,110	3,039	3,609
Lower 95% CI	20,27	21,16	16,27	25,58
Upper 95% CI	31,53	38,79	29,40	41,17

Table S8

Table Analyzed	Day Of Onset			
One-way analysis of variance				
P value	0,2189			
P value summary	ns			
Are means signif. different? (P < 0.05)	No			
Number of groups	4			
F	1,516			
R square	0,06634			
Bartlett's test for equal variances				
Bartlett's statistic (corrected)	2,004			
P value	0,5715			
P value summary	ns			
Do the variances differ signif. (P < 0.05)	No			
ANOVA Table				
	SS	df	MS	
Treatment (between columns)	51,36	3	17,12	
Residual (within columns)	722,9	64	11,30	
Total	774,3	67		
	wt	Hdac1-ko	Hdac2-ko	DKO
Number of values	25	15	14	14
Minimum	13,00	12,00	13,00	12,00
25% Percentile	14,00	13,00	15,00	14,00
Median	16,00	15,00	17,00	15,00
75% Percentile	19,00	17,00	19,25	16,25
Maximum	27,00	22,00	26,00	29,00
Mean	16,72	15,13	17,64	15,93
Std. Deviation	3,076	2,900	3,543	4,066
Std. Error	0,6151	0,7488	0,9470	1,087
Lower 95% CI	15,45	13,53	15,60	13,58
Upper 95% CI	17,99	16,74	19,69	18,28