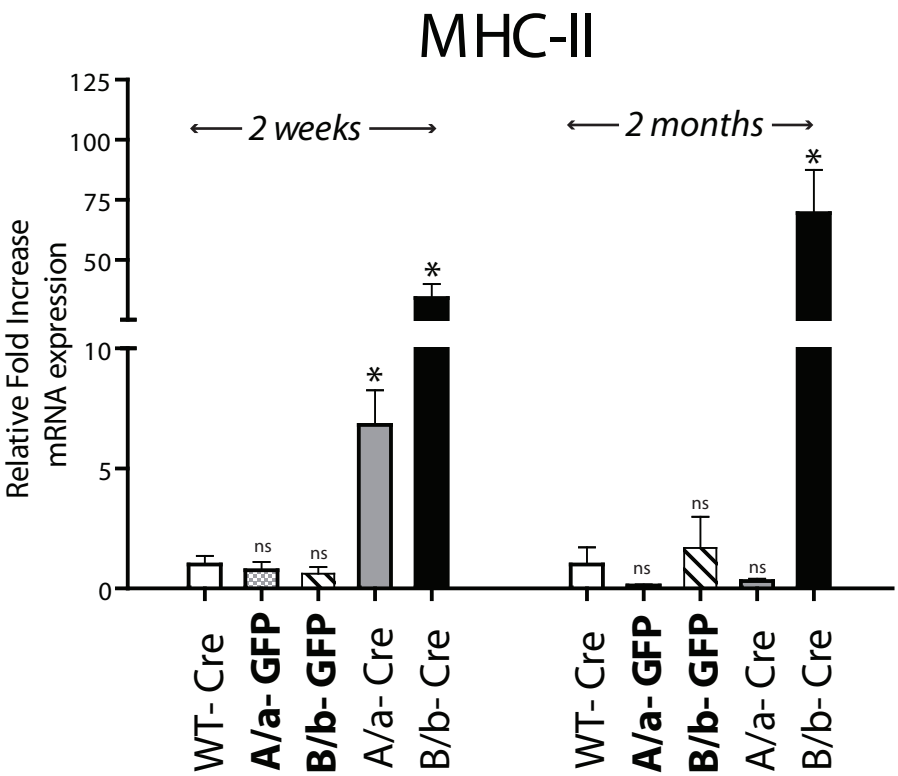
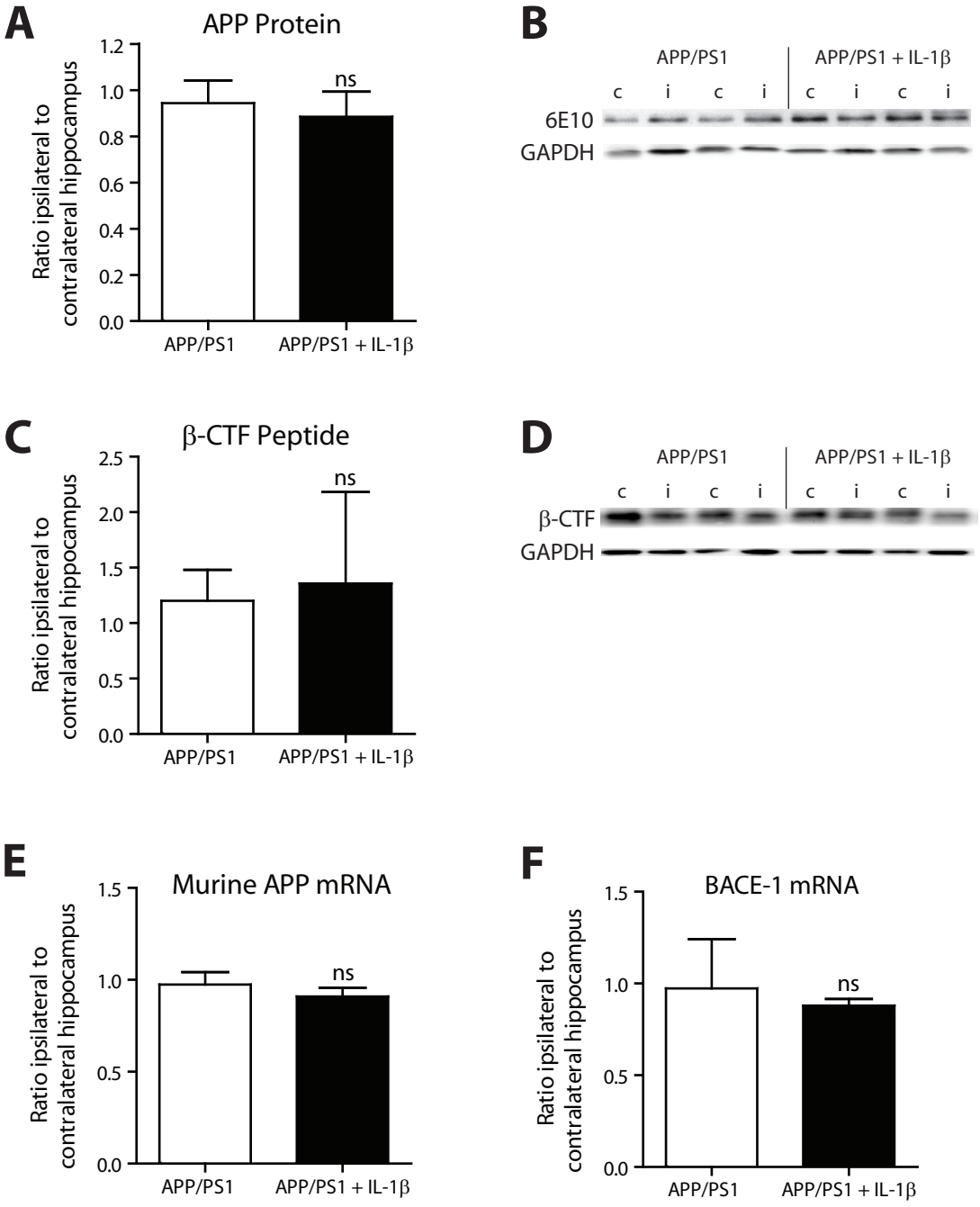
Supplemental Figure 1



Supplemental Table 1

AMYLOID PLAQUE INDICES								
Measure (Units)	*Group*	*Side*	*Mean (raw)*	*SEM (raw)*	*Mean (i/c ratio)*	*SEM (i/c ratio)*	*p-value*	*Sig.*
Congo Red Plaque Staining (n=7)								
Area Fraction (*% hippocampus*)	APP/PS1	**i**	0.372	0.088	1.054	0.142	0.0014	*
		c	0.358	0.066				
	APP/PS1 + IL-1β	**i**	0.145	0.029	0.433	0.050		
		c	0.362	0.081				
Frequency (*plaques per section*)	APP/PS1	**i**	27.57	3.45	1.163	0.118	0.0034	*
		c	25.00	3.70				
	APP/PS1 + IL-1β	**i**	12.57	2.05	0.623	0.091		
		c	23.00	4.73				
Aβ ELISA (n=6)								
Insoluble Aβ40 (*pg/mg hippocampus*)	APP/PS1	**i**	229.89	45.49	1.128	0.162	0.0151	*
		c	218.81	55.23				
	APP/PS1 + IL-1β	**i**	94.45	28.84	0.509	0.132		
		c	407.36	219.31				
Insoluble Aβ42 (*pg/mg hippocampus*)	APP/PS1	**i**	1422.04	212.40	1.098	0.046	0.0050	*
		c	1289.73	174.73				
	APP/PS1 + IL-1β	**i**	695.72	53.53	0.709	0.099		
		c	1164.63	278.84				
Soluble Aβ40 (*pg/mg hippocampus*)	APP/PS1	**i**	11.826	1.608	1.179	0.099	0.7612	ns
		c	10.065	0.968				
	APP/PS1 + IL-1β	**i**	8.998	0.809	1.317	0.428		
		c	9.951	2.178				
Soluble Aβ42 (*pg/mg hippocampus*)	APP/PS1	**i**	7.756	1.232	1.636	0.506	0.4010	ns
		c	6.591	1.473				
	APP/PS1 + IL-1β	**i**	3.676	0.611	1.013	0.499		
		c	6.601	1.788				

Supplemental Figure 2



Supplemental Figure 1

FIV-GFP control injections fail to elicit MHC-II induction in IL-1β^{XAT} mice. Line A/a and B/b IL-1β^{XAT} animals, as well as wild-type (WT) controls received unilateral intrahippocampal injections of either FIV-GFP or FIV-Cre. qRT-PCR analysis of MHC-II expression was performed at 2 weeks or 2 months following viral transduction in the ipsilateral (injected) hippocampus. As expected, FIV-GFP injections (graphed in bold) did not cause elevations in MHC-II expression in line A/a or B/b animals at either time point as compared to those injected with FIV-Cre (n=3-5 each group; graph represents mean ± SEM; ns=not significant; *=p<0.05).

Supplemental Table 1

Detailed Statistics of Amyloid Plaques and Peptides. This table lists the mean and standard error of the mean (SEM) of the data collected from both Congo red plaque staining and A_ ELISAs within the hippocampi of APPswe/PS1dE9 (APP/PS1) and IL-1β^{XAT} line B/b + APPswe/PS1dE9 (APP/PS1 + IL-1β) mice in Fig. 5. The side analyzed is denoted by i=ipsilateral or c=contralateral. Mean (raw) and SEM (raw) describe analysis on raw data generated in each treatment group. Mean (i/c ratio) and SEM (i/c ratio) describe analysis based on the ratio of the pathologic index within the ipsilateral vs. contralateral hippocampus of each animal. The i/c ratio provides a better representation of reductions in amyloid pathology because of the wide variability in pathologic lesions detected between individual animals. The p-value was calculated from a t-test comparing i/c ratios between APP/PS1 and APP/PS1 + IL-1β groups of animals, with significance (sig.) established at p<0.05 (*=significant; ns=not significant).

Supplemental Figure 2

IL-1β expression does not modulate APP and BACE-1 expression or BACE-1 enzymatic activity in APP/PS1 + IL-1β Mice. Amyloid precursor protein (APP) expression (A,B) was analyzed using the 6E10 antibody by Western blot (normalized to GAPDH) and did not reveal significant differences in expression between APP/PS1 and APP/PS1 + IL-1β groups of animals. (C,D) We next examined the activity of BACE-1 via detection of the product of its cleavage of APP, the beta C-terminal fragment (β-CTF). We did not detect significant differences in β-CTF levels between groups of animals. qRT-PCR analysis of (E) murine APP and (F) BACE-1 gene transcript expression also did not detect significant differences between the groups (n=6-7 each group; ns=not significant; graphs represent mean ± SEM).