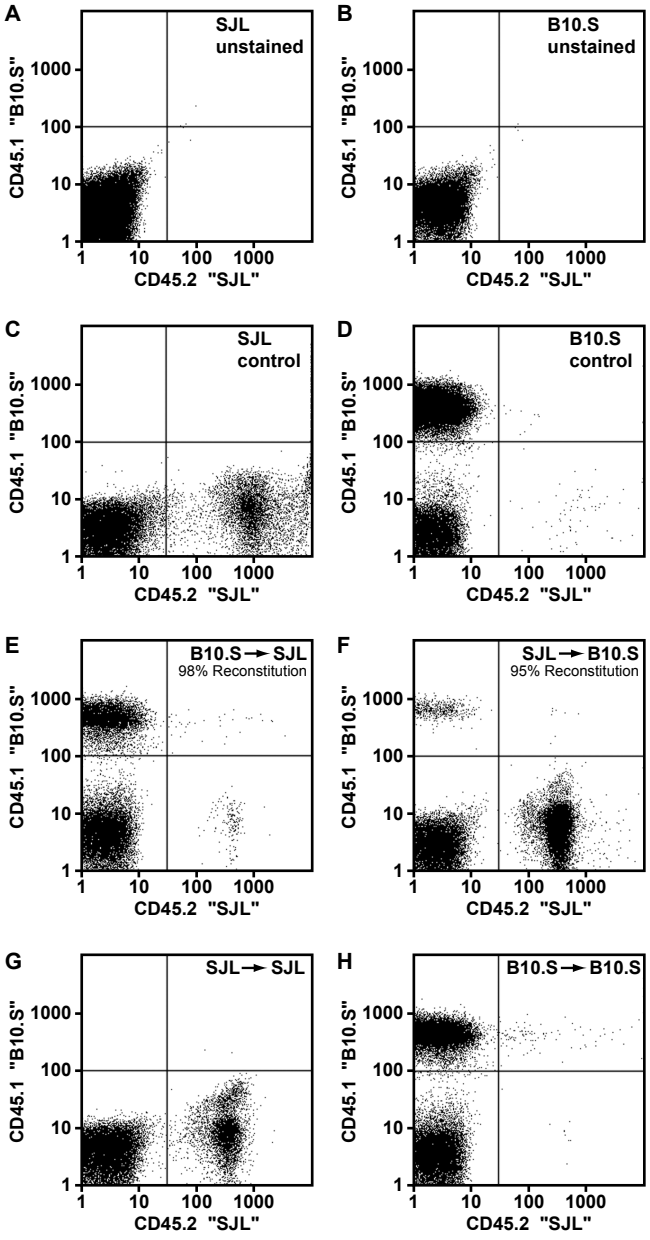
Hippocampal protection in mice with an attenuated inflammatory monocyte response to acute CNS picornavirus infection

Charles L Howe[1,2,3,*], Reghann G. LaFrance-Corey[1], Rhianna S Sundsbak[1], Brian M Sauer[1,4], Stephanie J LaFrance[1], Eric J Buenz[1,$], William F Schmalstieg[1]

Supplementary Figure 1. Bone marrow reconstitution converts the B10.S host to an SJL immune system and vice versa. Bone marrow transplantation was used to create chimeric mice with a B10.S nervous system and an SJL immune system or an SJL nervous system with a B10.S immune system. SJL immune phenotype is distinguished by CD45.2 staining and B10.S by CD45.1 staining in the peripheral blood mononuclear cell fraction. Unstained controls are shown in (A) and (B). Normal SJL (C) and B10.S (D) are shown as positive controls. Reconstitution of SJL hosts with B10.S bone marrow (E) and reconstitution of B10.S hosts with SJL bone marrow (F) led to essentially complete immunophenotypic conversion (98% ± 2% and 95% ± 1% respectively). Homologous transplants were used as controls to rule out reconstitution and manipulation artifacts (G, H). Dot plots are representative of at least 3 animals per condition in 2 separate experiments.


A
SJL
unstained
B
B10.S
unstained
C
SJL
control
D
B10.S
control
E
B10.S → SJL
98% Reconstitution
F
SJL → B10.S
95% Reconstitution
G
SJL → SJL
H
B10.S → B10.S
CD45.1 "B10.S"
CD45.2 "SJL"
1
10
100
1000